

**UTILITY PATENT APPLICATION TRANSMITTAL  
(Small Entity)***(Only for new nonprovisional applications under 37 CFR 1.53(b))*Docket No.  
WD2-99-007

Total Pages in this Submission

**TO THE ASSISTANT COMMISSIONER FOR PATENTS****Box Patent Application  
Washington, D.C. 20231**

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

**METHOD AND APPARATUS FOR PROVIDING CROSS-BENEFITS BASED ON A CUSTOMER ACTIVITY**

and invented by:

**Jay S. WALKER, Daniel E. TEDESCO, Stephen C. TULLEY, John M. PACKES, JR., Deirdre O'SHEA, Keith BEMER, James A. JORASCH, and Dean ALDERUCCI****If a CONTINUATION APPLICATION, check appropriate box and supply the requisite information:**☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP) of prior application No.: 09/219,267

Which is a:

☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP) of prior application No.: 09/xxx,xxx

Which is a:

☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP) of prior application No.: 09/116,367

Enclosed are:

**Application Elements**

1. ☒ Filing fee as calculated and transmitted as described below
2. ☒ Specification having 70 pages and including the following:
  - a. ☒ Descriptive Title of the Invention
  - b. ☒ Cross References to Related Applications *(if applicable)*
  - c. ☐ Statement Regarding Federally-sponsored Research/Development *(if applicable)*
  - d. ☐ Reference to Microfiche Appendix *(if applicable)*
  - e. ☒ Background of the Invention
  - f. ☒ Brief Summary of the Invention
  - g. ☒ Brief Description of the Drawings *(if drawings filed)*
  - h. ☒ Detailed Description
  - i. ☒ Claim(s) as Classified Below
  - j. ☒ Abstract of the Disclosure

**UTILITY PATENT APPLICATION TRANSMITTAL**  
**(Small Entity)**

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**Application Elements (Continued)**

3. ☒ Drawing(s) *(when necessary as prescribed by 35 USC 113)*

a. ☒ Formal      b. ☐ Informal      Number of Sheets 19

4. ☒ Oath or Declaration

a. ☒ Newly executed *(original or copy)*      ☐ Unexecuted

b. ☐ Copy from a prior application (37 CFR 1.63(d)) *(for continuation/divisional application only)*

c. ☒ With Power of Attorney      ☐ Without Power of Attorney

d. ☐ DELETION OF INVENTOR(S)

Signed statement attached deleting inventor(s) named in the prior application,  
see 37 C.F.R. 1.63(d)(2) and 1.33(b).

5. ☐ Incorporation By Reference *(usable if Box 4b is checked)*

The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. ☐ Computer Program in Microfiche

7. ☐ Genetic Sequence Submission *(if applicable, all must be included)*

a. ☐ Paper Copy

b. ☐ Computer Readable Copy

c. ☐ Statement Verifying Identical Paper and Computer Readable Copy

**Accompanying Application Parts**

8. ☒ Assignment Papers *(cover sheet & documents)*

9. ☐ 37 CFR 3.73(b) Statement *(when there is an assignee)*

10. ☐ English Translation Document *(if applicable)*

11. ☐ Information Disclosure Statement/PTO-1449      ☐ Copies of IDS Citations

12. ☐ Preliminary Amendment

13. ☒ Acknowledgment postcard

14. ☒ Certificate of Mailing

☐ First Class      ☒ Express Mail *(Specify Label No.):* EL287072879US

# UTILITY PATENT APPLICATION TRANSMITTAL (Small Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.  
WD2-99-007

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## Accompanying Application Parts (Continued)

15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☒ Small Entity Statement(s) - Specify Number of Statements Submitted: 1
17. ☐ Additional Enclosures (please identify below):

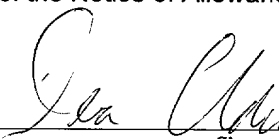
## Fee Calculation and Transmittal

### CLAIMS AS FILED

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	74	- 20 =	54	x \$9.00	\$486.00
Indep. Claims	32	- 3 =	29	x \$39.00	\$1,131.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
BASIC FEE					\$380.00
OTHER FEE (specify purpose)					\$0.00
TOTAL FILING FEE					\$1,997.00

- ☐ A check in the amount of \_\_\_\_\_ to cover the filing fee is enclosed.
- ☒ The Commissioner is hereby authorized to charge and credit Deposit Account No. 50-0271 as described below. A duplicate copy of this sheet is enclosed.
- ☒ Charge the amount of **\$1,997.00** as filing fee.
- ☒ Credit any overpayment.
- ☒ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Dated: March 31, 1999

  
Signature

Dean Alderucci  
Attorney for Applicant  
PTO Reg. No. 40,484  
Walker Digital Corporation  
Intellectual Property Department  
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cc:

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) AND 1.27 (c)) - SMALL BUSINESS CONCERN**

Docket No.  
WD2-99-007

Serial No.  
Not Assigned

Filing Date  
March 31, 1999

Patent No.  
Not Assigned

Issue Date  
Not Assigned

Applicant/ Jay S. WALKER et al.  
Patentee:

Invention: **METHOD AND APPARATUS FOR PROVIDING CROSS-BENEFITS BASED ON A CUSTOMER**

I hereby declare that I am:

- ☒ the owner of the small business concern identified below:  
☐ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN: Walker Digital Corporation

ADDRESS OF CONCERN: Five High Ridge Park, Stamford, Connecticut 06905-1326

I hereby declare that the above-identified small business concern qualifies as a small business concern as defined in 37 CFR 1.21.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under Section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the above identified invention described in:

- ☒ the specification filed herewith with title as listed above.  
☐ the application identified above.  
☐ the patent identified above.

If the rights held by the above-identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed on the next page and no rights to the invention are held by any person, other than the inventor, who could not qualify as an independent inventor under 37 CFR 1.9(c) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☒ no such person, concern or organization exists.  
☐ each such person, concern or organization is listed below.

FULL NAME

ADDRESS

☐

Individual

☐

Small Business Concern

☐

Nonprofit Organization

FULL NAME

ADDRESS

☐

Individual

☐

Small Business Concern

☐

Nonprofit Organization

FULL NAME

ADDRESS

☐

Individual

☐

Small Business Concern

☐

Nonprofit Organization

FULL NAME

ADDRESS

☐

Individual

☐

Small Business Concern

☐

Nonprofit Organization

Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING:

Jay S. Walker, President, Walker Digital Corporation

TITLE OF PERSON SIGNING

OTHER THAN OWNER:

ADDRESS OF PERSON SIGNING:

124 Spectacle Lane, Ridgefield, Connecticut 06877

SIGNATURE:



DATE:

March 31, 1999

**METHOD AND APPARATUS FOR PROVIDING  
CROSS-BENEFITS BASED ON A CUSTOMER ACTIVITY**

The present application is a continuation-in-part application of co-  
5 pending U.S. Patent Application No. 09/219,267 entitled "METHOD AND  
APPARATUS FOR FACILITATING ELECTRONIC COMMERCE THROUGH  
PROVIDING CROSS-BENEFITS DURING A TRANSACTION", filed on  
December 23, 1998; and is a continuation-in-part application of co-pending U.S.  
Patent Application No. \_\_\_\_\_ (attorney Docket No. 99-006) entitled "METHOD  
10 AND APPARATUS FOR PROVIDING CROSS-BENEFITS VIA A CENTRAL  
AUTHORITY", filed on March 22, 1999; which is a continuation-in-part application  
of co-pending U.S. Patent Application No. 09/219,267 entitled "METHOD AND  
APPARATUS FOR FACILITATING ELECTRONIC COMMERCE THROUGH  
PROVIDING CROSS-BENEFITS DURING A TRANSACTION", filed on  
15 December 23, 1998; and is a continuation-in-part application of co-pending U.S.  
Patent Application No. 09/116,367 entitled "METHOD AND APPARATUS FOR  
PROVIDING A DISCOUNT TO A CUSTOMER THAT PARTICIPATES IN  
TRANSACTIONS AT A PLURALITY OF MERCHANTS", filed on October 5,  
1998; the entirety of each incorporated by reference herein as part of the present  
20 disclosure.

**FIELD OF THE INVENTION**

The present invention relates to methods and apparatus for facilitating  
commerce.

25

## BACKGROUND OF THE INVENTION

There is a great deal of competition among vendors to attract and retain customers. Even when a customer has browsed a vendor's inventory, he will not make a purchase if an item's price is greater than the amount the customer is willing to pay. One way to increase customer willingness to purchase is to provide discounts on items purchased. Unfortunately, vendors must use discounts sparingly, since reducing purchase prices likewise reduces margins and the reduced margins may not be offset by increased sales volume.

A vendor may also offer promotions to provide an incentive for customers to make purchases. For example, a vendor may offer a "buy one get one free" promotion whereby a purchase of an item yields the benefit of an additional item at no cost. Similarly, a vendor may provide a discount on a purchase in exchange for signing up for a credit card account provided by the vendor.

Promotions may also be provided among two or more vendors. For example, a first vendor may advertise that if a particular product is purchased, another product may be purchased from or given away by a second vendor.

A parent application of the present application, U.S. Patent Application No. 09/219,267 entitled "METHOD AND APPARATUS FOR FACILITATING ELECTRONIC COMMERCE THROUGH PROVIDING CROSS-BENEFITS DURING A TRANSACTION", filed on December 23, 1998, discloses a method and apparatus that permits a customer that is purchasing items from a first vendor to receive a benefit (e.g. a credit for the price of the items) from a second vendor. The present application provides further embodiments of this novel and beneficial invention.

## SUMMARY OF THE INVENTION

It is an object of the present invention to provide a method and apparatus for facilitating commerce.

5           In accordance with the present invention, a controller receives information relating to customer activity with a first vendor, typically via a Web page that a customer accesses. The controller further receives an indication of items (goods and/or services) the customer desires to purchase, the items having an associated total price. The controller determines, based on any of various criteria, whether to provide  
10   an offer for a subsidy based on the information relating to customer activity. For example, a customer who places certain items in his virtual "shopping cart" may receive such an offer. The offer for a subsidy is from a second vendor (a subsidizing vendor), and may define, for example, a reduction in the price charged for the item and an obligation for the customer to fulfill in exchange for the subsidy. For example,  
15   the customer may be obliged to sign up for a credit card or telephone service provided by the subsidizing vendor.

          An indication of the offer for the subsidy is provided to the customer, e.g., via a text or graphical display on the Web page. The customer responds via known user interface techniques and, if he accepts the offer, he is charged a second  
20   price for the items. The second price is less than the total price, and may even be zero. Thus the customer may get his desired items for free in exchange for fulfilling the obligation with the subsidizing vendor.



## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A is a schematic illustration of an embodiment of an apparatus for facilitating commerce in accordance with the present invention.

FIG. 1B is a schematic illustration of another embodiment of an apparatus for facilitating commerce in accordance with the present invention.

FIG. 2 is a schematic illustration of a controller of the apparatus of FIG. 1.

FIG. 3 is a schematic illustration of a vendor server of the apparatus of FIG. 1.

FIG. 4 is a representation of a customer database of the controller of FIG. 2.

FIG. 5 is a representation of a vendor database of the controller of FIG. 2.

FIG. 6 is a representation of a transaction database of the controller of FIG. 2.

FIG. 7 is a representation of a subsidizer database of the controller of FIG. 2.

FIG. 8 is a representation of an offer rules database of the controller of FIG. 2.

FIG. 9 is a representation of an offers database of the controller of FIG. 2.

FIG. 10 is a representation of a record of an offer summary database of the controller of FIG. 2.

FIG. 11 is a representation of a record of another embodiment of the offer summary database.

FIG. 12 is a schematic illustration of an item database of the vendor server of FIG. 3.

5                   FIG. 13 is a flow chart illustrating an embodiment of a method for providing an offer for a benefit.

FIG. 14 is a flow chart illustrating an embodiment of a method for providing an offer for a benefit using offer rules.

10                   FIGS. 15A and 15B are a flow chart illustrating an embodiment of a method for providing an offer which may be accepted by fulfilling an obligation associated with the offer.

FIG. 16 is a flow chart illustrating an embodiment of a method for determining whether customers have fulfilled their obligations associated with an offer for a benefit.

15                   FIG. 17 is a flow chart illustrating an embodiment of a method for providing an offer for a benefit after a customer has made a purchase from a vendor.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Applicants have recognized that the acquisition budgets of various service providers may be advantageously used to facilitate commerce. A customer that purchases items from a first vendor may be paid, directly or indirectly, by a second vendor, so that the customer pays a reduced price, perhaps nothing at all, for his desired items. In exchange, the customer participates or agrees to participate in a transaction with the second vendor. For example, the customer may be required to

sign up for a service that is provided by the second vendor. Since many service providers are willing to pay significant amounts of money (e.g. often \$50 to \$200) to acquire a new customer, the ability to acquire a customer by essentially "intervening" in a sale between others can benefit all parties involved. In short, the second vendor provides a subsidy to the customer. The customer is benefited by the reduced price of his items, the first vendor is benefited by the increased sales and customer satisfaction that such an arrangement would bring, and the second vendor is benefited by the additional transaction, particularly the acquisition of a new customer in one embodiment.

In addition, applicants have also recognized that various types of customer activities may be used to indicate, among other things, whether the customer is likely to accept an offer for a benefit from a subsidizing vendor. For example, when a customer begins to interact with a first vendor (e.g. via the first vendor's Web site), various types of customer activity may be used to indicate whether the customer is willing to transact with the first vendor. Similarly, various types of customer activity may be used to indicate whether the customer is willing to transact with a subsidizing vendor. Detection of such customer activity can assist in identifying, e.g., which customers should be given offers for subsidies, and when.

Referring to FIG. 1A, an apparatus 100 includes a controller 110 that is in communication with a vendor server 120. The controller 110 and the vendor server 120 may comprise computers, such as those based on an Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Any number of vendor servers may be in communication with the controller 110. Those skilled in the art will understand that devices in communication

with each other need not be continually transmitting to each other. On the contrary, such devices need only transmit to each other as necessary, and may actually refrain from exchanging data most of the time. For example, a device in communication with another device via the Internet may not transmit data to the other device for weeks at a time.

The vendor server 120 may be a "Web server" of a vendor (e.g. a retail seller). A vendor server could then generate Web pages (documents on the World Wide Web that typically include an HTML file and associated graphics and script files) that may be accessed via the World Wide Web and allow purchases from the vendor to be made in a manner known in the art. A Web site consists of several such Web pages and associated databases served up by an HTTP server (e.g. the vendor server 120) on the World Wide Web. Alternatively, the vendor server 120 may be a computer involved in operating a physical store. Such a computer, for example a point of sale (POS) server, would perform such tasks as inventory management and transaction processing for the store.

The controller 110 is also in communication with a subsidizing vendor server 140. The subsidizing vendor server 140 may comprise a computer, such as those based on an Intel® Pentium® microprocessor, that is adapted to communicate via the Internet (e.g. via a modem) or other medium. Any number of subsidizing vendor servers may be in communication with the controller 110.

The subsidizing vendor server 140 may be a "Web server" of a vendor. The subsidizing vendor server 140 could then generate a Web page that may be accessed via the World Wide Web and allow transactions with the subsidizing vendor in a manner known in the art. Alternatively, the subsidizing vendor server 140 may

be a computer involved in operating a physical store. Such a computer would perform such tasks as inventory management and transaction processing.

The vendor server 120 may be in communication with a customer terminal 130 that transmits data regarding a customer transaction (e.g. a purchase).

- 5 Any number of customer terminals may be in communication with the vendor server 120. The customer terminal 130 may be a point of sale (POS) terminal, such as the NCR 7454 manufactured by NCR Corporation or the IBM 4683 manufactured by International Business Machines. As is known in the art, POS terminals perform such processes as calculating the total price of a purchase (goods or services) and
- 10 calculating the amount of change due to a customer. POS terminals may furthermore track purchases made and adjust databases of inventory accordingly.

- In another embodiment, the customer terminal 130 may be a computer, such as those based on an Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Such computers
- 15 are able to appropriately access a Web page to communicate with a vendor server in a manner that is known to those skilled in the art.

- In still other embodiments, the customer terminal 130 may be a telephone, an automated teller machine (ATM), slot machine, a vending machine or other device that receives payment from customers in exchange for providing goods
- 20 or services. The vendor server in such an embodiment could include an IVRU (Interactive Voice Response Unit), such as the Vision 2001 or the Insight IVR/Web, both from Interactive Voice Technologies, Corp., or the OmniVox for Windows NT from APEX Voice Communications. An IVRU allows a user of a DTMF (Dual Tone Multi-Frequency) signal generating telephone to communicate with a computer. The



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The device 200 comprises a processor 202, such as an Intel® Pentium® microprocessor. The processor 202 is in communication with a data storage device 210, such as an appropriate combination of magnetic, optical and/or semiconductor memory. For example, the data storage device 210 may comprise one or more of a ROM, RAM and hard disk. The processor 202 and the data storage device 210 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. In one embodiment, the controller 110 may comprise one or more computers that are connected to a remote server computer for maintaining databases.

The data storage device 210 stores a program 220 for controlling the processor 202. The processor 202 performs instructions of the program 220, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 220 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 202 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 210 also stores (i) a customer database 230, (ii) a vendor database 240, (iii) a transaction database 250, (iv) a subsidizer database 260, (v) an offer rules database 270, (vi) an offers database 280 and (vii) an offer summary database 290. The databases 230, 240, 250, 260, 270, 280 and 290 are described in detail below and depicted with exemplary entries in the accompanying figures. As

will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides those suggested by the tables shown.

- 5 Similarly, the illustrated entries of the databases represent exemplary information, and those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

FIG. 3 illustrates the vendor server 120 of FIG. 1A. As described above with reference to FIG. 1B, in one embodiment the vendor server may  
10 communicate with a subsidizing vendor server 180 without the intervening controller 110. Accordingly, the description of the vendor server 120 is applicable to the vendor server 160 of FIG. 1B. In such an embodiment, the databases stored by the data storage device of the vendor server could include the databases depicted in FIGS. 2 and 3.

15 The vendor server 120 comprises a processor 302, such as an Intel® Pentium® microprocessor, which is in communication with a customer terminal 315 and the controller 110. The processor 302 is also in communication with a data storage device 310, such as an appropriate combination of magnetic, optical and/or semiconductor memory. For example, the data storage device 310 may comprise one  
20 or more of a ROM, RAM and hard disk. The processor 302 and the data storage device 310 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. In one embodiment, the vendor server 120 may comprise one or



more computers that are connected to a remote server computer for maintaining databases.

The data storage device 310 stores a program 320 for controlling the processor 302. The processor 302 performs instructions of the program 320, and  
5 thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 320 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 302 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements  
10 are known to those skilled in the art, and need not be described in detail herein.

The storage device 310 also stores (i) a customer database 330, (ii) an item database 340, and (iii) a transaction database 350. The customer database 330 and the transaction database 350 of the vendor server 120 may be similar or identical to the customer database 230 and transaction database 250 of the controller 110. For  
15 example, the controller 110 may store data that is derived from the vendor server 120, and vice versa. If each vendor server stores data on its own customers and its own transactions, the controller 110 could aggregate this data from each vendor server.

The databases 330, 340 and 350 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood  
20 by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides those suggested by the tables shown. Similarly, the illustrated entries of the databases represent exemplary information, and those skilled in the art will

understand that the number and content of the entries can be different from those illustrated herein.

Referring to FIG. 4, a table 400 represents an embodiment of the customer database 230 (FIG. 2) and/or the customer database 330 (FIG. 3). The table 400 includes entries 402, 404, 406 and 408, each defining a customer that may purchase items from a vendor. Such information may be determined, for example, when a customer registers for a frequent shopper card. Those skilled in the art will understand that the table 400 may include any number of entries. The table 400 also defines fields for each of the entries 402, 404, 406 and 408. The fields specify (i) a customer identifier 420 that uniquely identifies the customer, (ii) a name 422 of the customer, (iii) a billing address 424 of the customer, (iv) credit card information 426 which may be used to render payment in purchasing the items, and (v) an electronic mail ("e-mail") address 428 for communication with the customer.

For each entry of the table 400, the data specified by fields 422, 424, 426 and 428 may be received from the corresponding customer (e.g. via the corresponding customer terminal and/or vendor server that interacts with the customer). For example, the data may be provided when the customer makes a purchase from a vendor's Web site by requiring the customer to enter information into an HTML form provided on a Web page. Upon registration of a new customer, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique customer identifier to store in the field 420 of the entry corresponding to the new customer. Once such information is stored for a customer, it may be retrieved upon reference to the appropriate customer identifier.

Referring to FIG. 5, a table 500 represents an embodiment of the vendor database 240 (FIG. 2). The table 500 includes entries 502, 504, 506 and 508, each defining a vendor that services customers and may have those customers receive offers for subsidies. Such information may be determined when a vendor registers for participation in the subsidizing program described herein. Those skilled in the art will understand that the table 500 may include any number of entries. The table 500 also defines fields for each of the entries 502, 504, 506 and 508. The fields specify (i) a vendor identifier 520 that uniquely identifies the vendor, (ii) a vendor name 522, (iii) a vendor e-mail address 524 for communication with the vendor, and (iv) an amount owed 526 to the vendor (e.g. promised but unpaid subsidy amounts).

For each entry of the table 500, the data specified by fields 522 and 524 may be received from the corresponding vendor (e.g. via the corresponding vendor server). For example, the data may be provided when the vendor registers with the controller 110 in the embodiment of FIG. 1A.. Upon registration of a new vendor, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique vendor identifier to store in the field 520 of the entry corresponding to the new vendor. Once such information is stored for a vendor, it may be retrieved upon reference to the appropriate vendor identifier.

Referring to FIG. 6, a table 600 represents an embodiment of the transaction database 250 (FIG. 2) and/or the transaction database 350 (FIG. 3). The table 600 includes entries 602, 604 and 606, each defining a transaction with a vendor server. Typically, the transaction includes a purchase of items by a customer. Those skilled in the art will understand that the table 600 may include any number of entries.

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The table 600 also defines fields for each of the entries 602, 604 and 606. The fields specify (i) a transaction identifier 620 that uniquely identifies the transaction, (ii) a time 622 of the transaction, (iii) the items ordered 624, (iv) credit card information 626 that may define a credit card account that was charged to pay for the items purchased, (v) an amount charged 628 for the items, (vi) a delivery address 630 for the items, and (vii) a customer identifier 632 (if any) that identifies the customer that made the purchase.

For each entry of the table 600, the data specified by fields 624, 626, 628, 630 and 632 may be received via the corresponding customer terminal. For example, the items ordered may be identified by being scanned by a bar code scanner that transmits a representative signal to a POS terminal. Alternatively, the items ordered may have been selected by a customer via a Web page displayed by his personal computer. Other ways to indicate items the customer desires to purchase will be apparent to those skilled in the art. Similarly, the credit card information may be read by a credit card reader that transmits a representative signal to a POS terminal. Alternatively, the credit card information may be entered by a customer into a form on a Web page displayed by his personal computer. Those skilled in the art will understand that other payment identifiers besides credit card information may be employed, such as debit card numbers, electronic cash identifiers. The use herein of a credit card as a means of payment is merely exemplary and not limiting on the scope of the present invention.

The data may be transmitted from the customer device to the controller 110 in the embodiment of FIG. 1A, or to the vendor server 160 in the embodiment of FIG. 1B. A unique transaction identifier may be generated and the time of the

transaction may be recorded (e.g. with reference to a clock signal generated by the customer terminal, vendor server, controller or other device). The transaction identifier and the time are stored in the fields 620 and 622 respectively of the entry corresponding to the new transaction. Once such information is stored for a transaction, it may be retrieved upon reference to the appropriate transaction identifier.

Referring to FIG. 7, a table 700 represents an embodiment of the subsidizer database 260 (FIG. 2). The table 700 includes entries 702, 704 and 706, each defining a subsidizing vendor that may subsidize purchases. Such information may be determined when a subsidizing vendor registers for participation in the subsidizing program described herein. Those skilled in the art will understand that the table 700 may include any number of entries. The table 700 also defines fields for each of the entries 702, 704 and 706. The fields specify (i) a subsidizing vendor identifier 720 that uniquely identifies the subsidizing vendor, (ii) a name 722 of the subsidizing vendor, (iii) an account 724 used to pay for the subsidies, (iv) an amount owed 726 by the subsidizing vendor, and (v) a rank 728 used to prioritize subsidizing vendors and/or subsidies from those subsidizing vendors. The ranks may be established periodically (e.g. once per year) based on various criteria. For example, the ranks may be adjusted dynamically based on the acceptance rates of offers from the subsidizing vendors and/or amount of funds the subsidizing vendors have provided in connection with their offers.

For each entry of the table 700, the data specified by fields 722 and 724 may be received from the corresponding subsidizing vendor (e.g. via the corresponding vendor server). For example, the data may be provided when the

subsidizing vendor registers with the controller 110 in the embodiment of FIG. 1A, or with the vendor server 160 in the embodiment of FIG. 1B. Upon registration of a new subsidizing vendor, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique subsidizing vendor identifier to store in the field 720 of the entry corresponding to the new subsidizing vendor. The amount owed is calculated and updated for each subsidizing vendor. Typically, the amount owed is updated when an offer from a particular subsidizing vendor is accepted by a customer. The rank of each subsidizing vendor is updated according to a ranking scheme. For example, subsidizing vendors may pay for a preferential rank, and/or rank may be determined by the number (or percentage) of corresponding offers that are accepted. Once such information is stored for a subsidizing vendor, it may be retrieved upon reference to the appropriate subsidizing vendor identifier.

Referring to FIG. 8, a table 800 represents an embodiment of the offer rules database 270 (FIG. 2). The table 800 includes entries 802, 804, 806, 808 and 810, each defining, among other things, an offer rule. When an offer rule is satisfied during a transaction, the vendor provides an offer for a specified benefit, such as a subsidy. Such information may be determined when a subsidizing vendor registers for participation in the subsidizing program described herein. Those skilled in the art will understand that the table 800 may include any number of entries. The table 800 also defines fields for each of the entries 802, 804, 806, 808 and 810. The fields specify (i) an offer rule identifier 820 that uniquely identifies the offer rule, (ii) a subsidizing vendor identifier 822 that uniquely identifies the subsidizing vendor, (iii) customer activity 824 that is required in order for an offer to be provided, (iv) a

subsidy amount 826, (v) when the offer rule is effective 828 (i.e. other requirements in order to satisfy the offer rule), and (vi) an additional transaction 830 that is required of the customer in exchange for the subsidy. As described below, several types of transactions, such as additional purchases or initiating service agreements, may be required of the customer.

Some types of customer activity in a Web embodiment include a mouse click on a predetermined portion of a Web page, on a predetermined banner advertisement, and on an indication of an item. Similarly, a mouse-over (indication of cursor location and/or movement) on a predetermined portion of a Web page and on predetermined portions of Web pages at least a predetermined number of times may be desirable customer activities. Such customer activity can indicate, for example, that the customer is evaluating particular products on the Web site by clicking on particular links or placing the cursor over the links.

Some other types of customer activity in a Web embodiment include performing a search for a predetermined item, opening or accessing an electronic cash account (e.g. an e-cash "wallet"), accessing predetermined Web pages, a predetermined number of predetermined Web pages, predetermined Web pages in a predetermined sequence, or predetermined Web pages during a predetermined time period; a duration that the Web site is open; and previous access to a predetermined Web site at least a predetermined number of times.

Other types of customer activity include a predetermined number of items that a customer is ready to purchase from a vendor (indicated, for example, by the content of the customer's virtual shopping cart), one or more predetermined items

that the customer is ready to purchase from a vendor, a duration that an item is selected for purchase, requesting a coupon for a predetermined item, an item having at least a predetermined price that the customer is ready to purchase from the first vendor, at least a predetermined number of previous purchases from the first vendor,  
5 and frequent shopper status of the customer.

For each entry of the table 800, the data specified by fields 824, 826, 828 and 830 may be received from the corresponding subsidizing vendor (e.g. via the corresponding subsidizing vendor server) for each offer rule the subsidizing vendor establishes. For example, the data may be provided when the subsidizing vendor  
10 registers with the controller 110 in the embodiment of FIG. 1A, or with the vendor server 160 in the embodiment of FIG. 1B. Upon creation of an offer rule, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique offer rule identifier to store in the field 820 of the entry corresponding to the new offer rule. The corresponding  
15 subsidizing vendor identifier would also be stored in the field 822. Once such information is stored for an offer rule, it may be retrieved upon reference to the appropriate offer rule identifier.

The customer activity that is required in order for an offer to be provided may be set by the subsidizing vendor. Alternatively, the required customer  
20 activity may be set by the controller 110 for each subsidizing vendor. For example, the subsidizing vendor may be unable to decide which type of customer activity should be required. In still another embodiment, the required customer activity may be set and thereafter dynamically adjusted based on acceptance rates of provided offers.



Referring to FIG. 9, a table 900 represents an embodiment of the offers database 280 (FIG. 2). The table 900 includes entries 902, 904, 906, 908 and 910, each defining an offer for a subsidy. The offer was provided to a customer during a transaction of the customer with the vendor. Those skilled in the art will understand that the table 900 may include any number of entries. The table 900 also defines fields for each of the entries 902, 904, 906, 908 and 910. The fields specify (i) an offer identifier 920 that uniquely identifies the offer, (ii) a transaction identifier 922 that uniquely identifies the transaction during which the offer was provided, (iii) a subsidizing vendor identifier 924 that uniquely identifies the subsidizing vendor, (iv) an identifier of an offer rule 926 that was applied during the transaction, (v) when the offer was provided 928, (vi) an expiration date 930 (if any) for the offer, (vii) a subsidy amount 932, (viii) a total price 934 that the customer would have to pay without the subsidy, (ix) a total price 936 that the customer would have to pay with the subsidy, and (x) when the offer was accepted 938 (if it was accepted). As described above with reference to FIG. 8, offer rules define specific subsidies. Thus, the identifier of an offer rule stored in field 926 may be used to determine a corresponding subsidy amount.

The subsidy amount may be a fixed amount, such as \$50. The subsidy amount may further be dependent on various criteria such as the purchase total. For example, the subsidy amount could be for the lesser of the purchase total and \$50. Similarly, the subsidy amount could be for the lesser of a portion of the purchase total and \$50. For example, the subsidy amount could be for the lesser of \$50 and half the purchase total.

For each entry of the table 900, the data specified by fields 928, 934, 936 and 938 may be received from the corresponding customer terminal for each offer that has been provided. For example, when the offer is provided a new entry of the table 900 may be created. At that time, the date and time that the offer was provided may be recorded (e.g. with reference to a clock signal generated by the customer terminal, vendor server, controller or other device), and the total price and the total price with the subsidy amount may be received, e.g., from the POS terminal. The field 938 of the new entry would initially be set to "open" to indicate that the offer is open (not yet accepted or rejected). Field 922, 924 and 926 of the new entry would be set to the appropriate identifiers. Field 930 could be calculated from the field 928 (e.g. a predetermined time after the time in field 928 or "none" if there is no desired expiration date). Field 932 is determined from the corresponding offer rule applied, as described above with respect to field 826. Upon creation of an entry in the table 900, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique offer identifier to store in the field 920. Once such information is stored for an offer, it may be retrieved upon reference to the appropriate offer rule identifier. The field 938 may be updated when an offer is rejected or accepted.

Referring to FIG. 10, a table 1000 represents a record of an embodiment of the offer summary database 290 (FIG. 2). The offer summary database 290 typically includes a plurality of records, each defining a summary of offers for subsidies that have been provided on behalf of a particular subsidizing vendor. The table 1000 includes a subsidizing vendor identifier 1002 that uniquely identifies the subsidizing vendor, a total number of offers provided 1004 on behalf of

the subsidizing vendor, a total number of those offers that were accepted 1006, and a total amount 1008 of the subsidies due in connection with accepted offers.

The table 1000 also includes entries 1010 and 1012, each defining offers provided due to satisfaction of an offer rule of the subsidizing vendor. Those skilled in the art will understand that the table 1000 may include any number of entries. The table 1000 also defines fields for each of the entries 1010 and 1012. The fields specify (i) an offer rule identifier 1020 that uniquely identifies the offer rule, (ii) a number 1022 of offers provided due to the offer rule, (iii) a number 1024 of these offers that were accepted, and (iv) an amount 1026 of the subsidies due in connection with these accepted offers. If desirable, the information stored in the offer summary database 290 (FIG. 2) may be organized by the vendor through which the offer was provided. Such an embodiment would allow a comparison of the acceptance rate of offers at different vendors.

For each subsidizing vendor, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would create a record such as the record 1000 and store the subsidizing vendor identifier 1002. For each offer rule associated with the subsidizing vendor, a corresponding entry is created and the offer rule identifier is stored in field 1020. For each entry in the record, the data specified by fields 1022, 1024 and 1026 may be adjusted as offers are provided and acceptances of the offers are received. For example, when an offer is provided, the corresponding offer rule is identified and thus the corresponding entry is identified. The field 1022 of that entry is increased by one to reflect the newly-provided offer. Similarly, when an offer is accepted, field 1024 of that entry is

increased by one to reflect the new acceptance and the amount of the subsidy associated with the accepted offer is added to the field 1026 of the entry.

The sum of the number of offers indicated by the field 1022 for all entries is stored as the total number of offers 1004 for the corresponding record.

- 5 Similarly, the number of offers accepted indicated by the field 1024 for all entries is stored as the total number of offers accepted 1006 for the corresponding record, and the sum of the amounts indicated by the field 1026 for all entries is stored as the total amount 1008 for the corresponding record. Once such information is stored for a subsidizing vendor, it may be retrieved upon reference to the appropriate subsidizing
- 10 vendor identifier. Accordingly, information for, e.g., account reconciliation for each subsidizing vendor may be derived from such information.

- Referring to FIG. 11, a table 1100 represents a record of another embodiment of the offer summary database 290 (FIG. 2). In the illustrated embodiment, information is organized by offer rule. In one embodiment, for each
- 15 offer rule various types of customer activity may have been required. The results of each type of customer activity are summarized in the record.

- Various types of customer activity may be required for an offer rule in order to test which customer activities are relatively successful in soliciting an acceptance of an offer. For example, every hour a different customer activity may be
- 20 required in order for an offer to be provided in accordance with the offer rule. In such an embodiment, each hour the controller 110 (FIG. 1A) may update the customer activity field 824 of an entry of the offer rules database 270 to reflect the new customer activity that is required. The most successful customer activity requirement may then be used in the future.

The offer summary database 290 can include a plurality of records, each defining a summary of offers for subsidies that have been provided in response to a customer activity in accordance with the offer rule. The table 1100 includes an offer rule identifier 1102 that uniquely identifies the offer rule. The table 1100 also includes entries 1104, 1106 and 1108. Each entry defines offers provided in accordance with the offer rule and upon certain customer activity. Those skilled in the art will understand that the table 1100 may include any number of entries. The table 1100 also defines fields for each of the entries 1104, 1106 and 1108. The fields specify (i) customer activity 1120 required for the offer, (ii) a number 1122 of offers provided due to the particular customer activity for the offer rule, (iii) a number 1124 of these offers that were accepted, and (iv) an acceptance rate 1126 (the ratio of offers accepted to number of offers provided). If desirable, the information stored in the offer summary database 290 (FIG. 2) may be organized according to other information.

For each offer rule, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would create a record such as the record 1100 and store the offer rule identifier 1102. For each customer activity that was or is associated with the offer rule, a corresponding entry is created and an indication of the customer activity is stored in field 1120. For each entry in the record, the data specified by fields 1122, 1124 and 1126 may be adjusted as offers are provided and acceptances of the offers are received. For example, when an offer is provided in response to a particular customer activity, the corresponding entry is identified. The field 1122 of that entry is increased by one to reflect the newly-provided offer. Similarly, when an offer is accepted, field 1124 of that entry is

increased by one to reflect the new acceptance and the acceptance rate is calculated and stored in the field 1126 of the entry. Once such information is stored for an offer rule, it may be retrieved upon reference to the appropriate offer rule identifier.

Referring to FIG. 12, a table 1200 represents an embodiment of the item database 340 (FIG. 3). The table 1200 includes entries 1202 and 1204, each defining an item sold via a vendor server. Those skilled in the art will understand that the table 1200 may include any number of entries. The table 1200 also defines fields for each of the entries 1202 and 1204. The fields specify (i) a item identifier 1220 that uniquely identifies the item, (ii) an item description 1222, (iii) an item price 1224 for which the item is typically sold, and (iv) an availability 1226 of the item which may be based on an inventory level of the item.

For each entry of the table 1200, the data specified by fields 1222, 1224 and 1226 may be received from the corresponding vendor. For example, the data may be provided when a vendor prepares to sell the item. Upon the entering of a new item, the vendor server would generate a unique customer identifier to store in the field 1220 of the entry corresponding to the new item. Once such information is stored for an item, it may be retrieved upon reference to the appropriate item identifier.

Referring to FIG. 13, a flow chart 1300 illustrates an embodiment of a method for providing an offer for a benefit (e.g. a reduced price) to a customer that is to purchase items from a vendor. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed by the vendor server 160 in the embodiment of FIG. 1B.

Information relating to customer activity of a customer with a first vendor is received (step 1302). Such information may be received via a Web server, for example, in an embodiment where a vendor sells via the Internet. The Web server, which may be the vendor server, may receive data from the customer terminal  
5 that indicates, for example, hyperlinks that the customer clicks on, buttons that the customer actuates, or mouse movements of the customer terminal.

The information may be received from a "cookie" stored on the customer terminal (e.g. on a personal computer of the customer). Such a cookie is a block of data that a Web server (e.g. the vendor server) stores on a client system (e.g.  
10 a customer terminal). When a user returns to the same Web site, the browser of the customer terminal sends a copy of the cookie back to the Web server. Cookies may be used to identify users of the customer terminal, to instruct the Web server to send a customized version of a Web page, to submit account information for the user, and for other administrative purposes.

15 The information may be received via a telephone, for example, in an embodiment where a vendor sells via an IVRU. The information may also be received via a POS terminal, for example, in an embodiment where a vendor sells at a retail store. The POS terminal receives data such as UPC codes that identify items scanned with a bar code scanner, prices of those items, and information received from  
20 a customer's frequent shopper card. Similarly, the information may be received via a device, such as a PDA (Personal Digital Assistant) or a scanner mounted on a shopping cart, that the customer uses to indicate the items he has selected for purchase or the items in which he is otherwise interested.

The information may also be received via a sensor that senses the presence or location of a customer. For example, infrared or pressure sensors may be disposed in a store and operable to sense when a customer is near particular products or areas.

5           The information may also be received via a device that scans items with a bar code scanner and provides the prices of those items that are scanned. Such devices are known and are frequently disposed in supermarkets to allow customers to determine the prices of items, especially items that are on sale or otherwise subject to special pricing.

10           It is then determined whether an offer for a subsidy should be provided (step 1304). In one embodiment, the information relating to customer activity dictates whether the offer is provided. For example, as described in detail below there may be one or more rules specifying customer activity that is required. If an offer should not be provided, then the controller 110 interacts with the customer conventionally (step  
15   1306).

          Otherwise, an offer for a subsidy from a second vendor is determined (step 1308). For example, in an embodiment where one or more rules are included, if a rule is satisfied a corresponding offer for a subsidy is provided. An indication of the offer (or offers) is provided to the customer (step 1310). For example, text and/or  
20   images may be displayed on a Web page that is displayed on the customer terminal, text may be displayed on a monitor of a POS terminal, or an audio signal may be transmitted via an IVRU to a telephone.

          The indication of the offer may be provided via a device, such as a PDA (Personal Digital Assistant) or a display mounted on a shopping cart of the



customer, that accompanies the customer as he browses a store. Similarly, a display disposed in a particular location in the store (e.g. below a product display) may provide an offer to a customer that is near particular products or areas.

5 The indication of the offer may be provided via a device that scans items with a bar code scanner and provides the prices of those items scanned. In one embodiment, such a device could display an offer upon scanning the bar code of an item.

10 The offer typically specifies a subsidy amount and an obligation to fulfill in exchange for the subsidy. For example, an additional transaction may be required of the customer. In an embodiment where the second vendor provides services, the customer may be required to sign up for a service that is provided by the second vendor (e.g. initiate a service agreement with the second vendor). The customer may be required to switch from a current service provider to the second vendor, so that the service will no longer be provided by the current service provider.

15 Examples of services include telephone service, Internet service, banking services, credit card account services, insurance service, securities trading service, utilities service, satellite television service, or cable television service. Telephone service can include long distance service such as is provided by Sprint Communications Company, L.P or wireless service such as is provided by AT & T.

20 Signing up for banking services may include the requirement to transfer a particular minimum balance to a new bank account. Signing up for credit card account services may similarly include the requirement to apply for a credit card account and/or transfer a particular minimum balance to a new or existing credit card account.

Signing up for securities trading services may include the requirement to open an account with a particular minimum balance amount.

5 The controller 110 receives an indication of items the customer desires to purchase (step 1312). For example, the items may have been scanned by a bar code scanner and thus identified by a POS terminal. Alternatively, the items may have been selected by a customer via a Web page and put in a virtual "shopping cart". Other ways to indicate items the customer desires to purchase will be apparent to those skilled in the art.

10 The controller 110 also receives a response to the offer from the customer terminal (step 1314). The customer may indicate his response by, for example, clicking a button on a Web page, actuating particular keys on a touch-tone telephone, actuating a button on a keypad in communication with a POS terminal, or verbally responding to a cashier that actuates buttons on the POS terminal.

15 If the response does not indicate an acceptance of the offer (step 1316), then the controller 110 interacts with the customer conventionally (step 1306). Otherwise, the offer is accepted and the customer is charged a lower price for the items than he otherwise would have been charged (step 1318). The customer may even get the items for free or receive a credit (e.g. money back or store credit). In another embodiment, the benefit to the customer may be different than a reduced price  
20 on the items he desires to purchase. For example, the customer may be given a product upgrade to another (higher value) item or the customer may be given an additional item at a discount or for free. The customer may also be provided with cash, store credit or other monetary award.

The customer may be charged the lower price in single transaction. For example, if an item is normally sold for \$80, but is sold to a particular customer for \$60 in connection with an offer for a subsidy, a credit card account of the customer may be charged \$60 in one transaction. Alternatively, the customer's credit card account may be charged \$80, and then subsequently credited for \$20 ( $\$20 = \$80 - \$60$ ).

Referring to FIG. 14, a flow chart 1400 illustrates an embodiment of a method for providing an offer for a benefit to a customer that is to purchase items from a vendor. In particular, in the illustrated embodiment one or more rules determine which offers (if any) are provided to a customer. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed by the vendor server 160 in the embodiment of FIG. 1B.

Information relating to customer activity of a customer with a first vendor is received (step 1402), as described above. The controller selects an offer rule to evaluate against the customer activity (step 1404). The rule may be defined by and selected from the offer rules database 270 (FIG. 2). For example, referring again to FIG. 8, each entry of the table 800 defines an offer rule. Accordingly, the controller 110 may select an entry of the offer rules database 270 (e.g. starting with the first entry).

As described above, each offer rule includes customer activity that is required in order for an offer to be provided. Accordingly, the received information relating to customer activity may be compared with the customer activity that is required by the offer rule (step 1406). If the customer activity does not satisfy the

offer rule, then it is determined whether there are more offer rules that have not yet been so compared to the received information (step 1408). If there are not any more offer rules, then the controller 110 interacts conventionally with the customer (step 1410).

5                   If there are more offer rules, then another offer rule is selected (step 1404). For example, the next entry in the offer rules database 270 may be selected. Those skilled in the art will realize that the offer rules need not be selected according to the sequence defined by the offer rules database 270.

10                   If the customer activity does satisfy the offer rule, then the controller 110 determines if the offer rule is otherwise effective (step 1412). For example, referring to FIG. 8, each entry of the table 800 defines other requirements necessary in order to satisfy the offer rule (i.e. the field 828). If the rule is not otherwise effective (i.e. the other requirements are not satisfied), then it is determined whether there are more offer rules that have not yet been so compared to the received information (step 1408). If there are not any more offer rules, then the controller 110 interacts conventionally with the customer (step 1410). Otherwise, another offer rule is selected (step 1404).

20                   If the offer rule is otherwise effective, then the controller 110 generates an offer (step 1414). The offer indicates the subsidy amount (specified by the field 826 of the corresponding entry) and an additional transaction required (specified by the field 830 of the corresponding entry). An indication of the offer is provided to the customer (step 1416), as described above. If there any more offer rules, then they are in turn selected and evaluated as described above.

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The illustrated method allows one or more offers to be provided to a customer. The customer may in turn accept an offer as described above. In particular, if a plurality of offers are provided to the customer substantially simultaneously, the customer may be asked to select one (or more) of the plurality, and the selection would indicate an acceptance of the selected offer. Alternatively, if a plurality of offers are provided sequentially (i.e. another offer is provided if a prior offer is not accepted), then the sequence of the offers may be defined by, for example, the ranks of the corresponding subsidizing vendors.

Referring to FIGS. 15A and 15B, a flow chart 1500 illustrates an embodiment of a method for providing an offer for a benefit to a customer that is to purchase items from a vendor. In particular, in the illustrated embodiment a customer receives a subsidy subject to an obligation. The customer may receive an immediate benefit in exchange for participating or agreeing to participate in a transaction with the second vendor. For example, the customer may be required to participate in a future transaction with the second vendor. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed by the vendor server 160 in the embodiment of FIG. 1B.

Information relating to customer activity of a customer with a first vendor is received (step 1502). It is then determined whether an offer for a subsidy should be provided (step 1504). If an offer should not be provided, then the controller 110 interacts with the customer conventionally (step 1506). Otherwise, an offer for a subsidy from a second vendor is determined (step 1508). For example, the information relating to customer activity may satisfy a rule, and the rule in turn

specifies an offer. The controller 110 provides an indication of the offer (including its associated obligation) to the customer (step 1510).

The controller 110 receives an indication of items the customer desires to purchase (step 1512). The controller 110 also receives a credit card account  
5 identifier (step 1514), such as a credit card number. The credit card account identifier may be received, for example, via a credit card authorization terminal that is in communication with a POS terminal, as is known to those skilled in the art.

The credit card account is charged a lower price for the items than otherwise would have been charged (step 1516). The customer may even get the  
10 items for free. The controller 110 determines whether the customer has fulfilled the obligation of the offer (step 1518). For example, the obligation could be a requirement to sign up for a service provided by the second vendor. In such an embodiment, the second vendor may provide, for example, telephone service, Internet service, banking services, credit card account services, insurance service, securities  
15 trading service, satellite television service, or cable television service. The obligation may further include a requirement that the service be maintained for a particular amount of time.

In some embodiments, the customer may have been required to fulfill the obligation before his credit card account is charged. For example, the customer  
20 may have been required to fill out a credit card application before completing the purchase of his items. In other embodiments, the obligation may be need to be fulfilled at still other times.

The controller 110 can access a list of new or existing customers to determine whether the customer has fulfilled his obligation by signing up (and

therefore becoming a new customer). The controller 110 could access such a list periodically (e.g. every week) or upon demand (e.g. the controller receives the names of new customers as they become available). Alternatively, the controller 110 could query the subsidizing vendor server, and in response receive a signal that indicates whether the customer had signed up for service from the second vendor. Similarly, the customer could be required to switch service providers from another service provider to the second vendor.

If the customer has fulfilled the obligation, then the controller 110 records the time and date the obligation was fulfilled (step 1520). The time and date may be stored, for example, in the field 938 of the entry corresponding to the offer. In such an embodiment, fulfilling the obligation may be considered acceptance of the offer.

If the customer has not fulfilled the obligation, then it is determined whether the offer has expired (step 1522). The expiration date and time of an offer is indicated by the field 930 of the offers database 280 (FIG. 2), and may be calculated based on the time the offer was provided. If the offer has expired without the obligation being fulfilled, the credit card account of the customer is charged for the difference between the item price and the lower price previously charged (step 1524). This step assesses a penalty against the customer by removing the benefit that was previously provided to the customer if the customer does not fulfill the obligation within the allotted time. For example, if the credit card account was previously charged \$80 (in one or more transactions) in step 1516 for a \$95 item, then in step 1524 the credit card account is charged \$15 ( $\$15 = \$95 - \$80$ ). Thus, if the obligation is not fulfilled, the credit card account is charged \$95 in total (\$80 and \$15), which is

the conventional price for the item. An even larger amount may be charged (i.e. greater than \$15 in the above example) if desired to deter customers from reneging on the obligation.

Referring to FIG. 16, a flow chart 1600 illustrates an embodiment of a method for determining whether customers have fulfilled their obligations associated with an offer for a benefit. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed by the vendor server 160 in the embodiment of FIG. 1B.

In the illustrated embodiment the obligation is to become a new customer of a subsidizing vendor. For example, the customer may have been obliged to initiate a new service agreement so that a particular service is provided to the customer by the subsidizing vendor. Those skilled in the art will understand the various modifications required in embodiments with other types of obligations.

The controller 110 selects a customer from a list of new customers (step 1602) of the subsidizing vendor. The list of new customers may be generated by the subsidizing vendor and transmitted to the controller 110 periodically (e.g. every week) or upon request. Such a list may be compiled by the subsidizing vendor as customers sign up for service and/or complete prerequisites for becoming a customer. Customers may be selected from the list, for example, in the order that they signed up during a predetermined period of time.

The controller 110 then determines if the selected customer has been offered a subsidy (step 1604). The controller may determine whether the selected customer is represented in any entry of the offers database 280. For example,



referring again to FIG. 9, each entry of the table 900 includes in field 922 an indication of the transaction during which the offer was provided. The corresponding entry of the transaction database 250 in turn indicates a customer identifier (e.g. the field 632 of the table 600). If the selected customer has not been offered a subsidy, then the controller 110 determines whether there are more customers that have not yet been selected (step 1610). Another customer is selected (step 1602) as long as there are more customers in the list that have not been selected.

If the selected customer has been offered a subsidy, the controller 110 determines if the offer for the subsidy included an obligation to become a customer of the subsidizing vendor (step 1606). For example, referring again to FIG. 9, each entry of the table 900 includes in field 926 an indication of the offer rule applied during the transaction. The corresponding entry of the offer rules database 270 in turn indicates an additional transaction required of the customer (e.g. in the field 830 of the table 800). Thus, the controller 110 determines whether the presence of the selected customer on the list of new customers indicates fulfillment of a previous obligation.

If the offer for the subsidy included an obligation to become a customer of the subsidizing vendor, then the controller 110 records that the selected customer has fulfilled his obligation (step 1608). For example, the time and date that the customer became a new customer of the subsidizing vendor may be recorded in the field 938 of the corresponding entry of the table 900. Then additional customers, if any, are selected and processed similarly (e.g., steps 1610 and 1602). Customers that have not fulfilled their respective obligations may eventually be penalized in some manner, for example, by charging their credit card accounts a penalty fee amount.

In contrast to the above-described method, the controller 100 could search a list of customers that have accepted offers, rather than a list of new customers, in order to determine whether those customers have become new customers of the specified vendor.

5 Referring to FIG. 17, a flow chart 1700 illustrates an embodiment of a method for providing an offer for a benefit after a customer has made a purchase from a first vendor. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed by the vendor server 160 in the embodiment of FIG. 1B.

10 The controller 110 selects a customer from the list of customers that have purchased from the first vendor (step 1702). For example, as is known in the art the first vendor may record the name, address, telephone number and/or e-mail address of each customer that purchases items within a predetermined time period (e.g. each month). The customer selected from the list may be, for example, the first  
15 customer that purchased items during a predetermined period of time. When a customer makes a purchase, the vendor server may determine if contact information of the customer is stored. For example, the vendor server may determine whether the customer is a member of a frequent shopper program (in which contact information is typically obtained upon registration). Alternatively, it may be determined whether the  
20 customer filled in a form on a Web page that requests contact information. If contact information of the customer is not stored, the vendor server can then request contact information of the customer, and wait for the customer to provide that contact information.

5 The controller then determines whether the selected customer should be provided an offer for a subsidy (step 1704) from a second vendor, as described above. If the customer should not be provided with an offer for a subsidy, then the controller determines whether there are more customers on the list (step 1708). If so, then another customer is selected (step 1702).

10 If the customer should be provided with an offer for a subsidy, then the controller 110 provides an indication of the offer for a subsidy to the selected customer using contact information of the customer (step 1706). The indication of an offer may be provided, for example, via e-mail, postal mail, and/or telephone. For example, the controller 110 may generate a textual message specifying the offer, and then transmit that message via e-mail to an e-mail address of the customer. The controller 110 may also generate a textual message which is printed onto a sheet of paper, and a postal mail address which is printed onto a mailing label. The mailing label is used in directing the sheet of paper to the customer via conventional postal mail. For example, the offer may be provided on a credit card billing statement of the customer. The controller 110 may also generate an audio message which is transmitted via a telephone to the customer by connecting to the appropriate telephone number.

20 Although the present invention has been described with respect to a preferred embodiment thereof, those skilled in the art will note that various substitutions may be made to those embodiments described herein without departing from the spirit and scope of the present invention. For example, although in many of the described embodiments above the benefit provided to the customer is a subsidy,

there are many other types of benefits which are contemplated by the present invention.

What is claimed is:

- 1 1. A method, comprising the steps of:  
2 receiving information relating to customer activity of a customer with a first  
3 vendor;  
4 providing, in response to the received information, an indication of an offer for  
5 a subsidy from a second vendor;  
6 receiving an indication of at least one item the customer desires to purchase,  
7 the at least one item having an associated total price; and  
8 charging the customer a second price for the at least one item if the offer is  
9 accepted, the second price being less than the total price.
- 1 2. The method of claim 1, in which the step of receiving information relating to  
2 customer activity comprises:  
3 reading information from a cookie.
- 1 3. The method of claim 1, in which the step of receiving information relating to  
2 customer activity comprises:  
3 receiving information via at least one of a Web server, a telephone and a POS  
4 terminal.
- 1 4. The method of claim 1, wherein the indication of an offer for a subsidy is  
2 provided via at least one of e-mail, postal mail, and telephone.

1 5. The method of claim 1, in which the step of charging the customer the second  
 2 price for the at least one item comprises:  
 3 charging the customer the total price; and  
 4 crediting an amount of funds to an account, the amount of funds being based  
 5 on a difference between the total price and the second price.

1 6. The method of claim 5, in which the step of crediting is performed after the  
 2 step of charging the total price.

1 7. The method of claim 5, in which the step of crediting comprises:  
 2 crediting the amount of funds to a credit card account.

1 8. The method of claim 1, in which the step of charging the customer the second  
 2 price for the at least one item comprises:  
 3 charging the second price to an account in one transaction.

1 9. The method of claim 1, further comprising:  
 2 determining whether to provide an offer for a subsidy based on the  
 3 information relating to customer activity.

1 10. The method of claim 9, in which the step of determining whether to provide an  
 2 offer for a subsidy based on the information relating to customer activity comprises:  
 3 determining if the information relating to customer activity satisfies at least  
 4 one rule.

1 11. The method of claim 1, further comprising:  
2 determining if the information relating to customer activity satisfies at least  
3 one rule.

1 12. The method of claim 11, in which the step of providing, in response to the  
2 received indication, an indication of an offer for a subsidy is performed if the  
3 information relating to customer activity satisfies at least one rule.

1 13. The method of claim 1, further comprising:  
2 determining an offer for a subsidy from the second vendor based on the  
3 information relating to customer activity.

1 14. The method of claim 13, further comprising:  
2 determining an offer for a subsidy from the second vendor based on a rule and  
3 the information relating to customer activity.

1 15. The method of claim 1, further comprising:  
2 determining an offer for a subsidy from the second vendor if the information  
3 indicates a willingness to transact.

1 16. The method of claim 1, further comprising:  
2 receiving a response to the offer.

1 17. The method of claim 16, further comprising:

2 determining whether the response was received within a predetermined period  
3 of time.

1 18. The method of claim 17, in which the step of charging is performed only if the  
2 response indicates acceptance of the offer and if the response was received within the  
3 predetermined period of time.

1 19. The method of claim 17, in which the predetermined period of time is a  
2 predetermined amount of time after the indication of an offer was provided.

1 20. The method of claim 16, in which the step of charging is performed only if the  
2 response indicates acceptance of the offer.

1 21. The method of claim 1, in which the offer for the subsidy defines an obligation  
2 for the customer to fulfill in exchange for the subsidy; and further comprising:  
3 receiving an indication that the customer has fulfilled the obligation.

1 22. The method of claim 21, in which the step of receiving an indication that the  
2 customer has fulfilled the obligation comprises:  
3 receiving an indication that the customer has switched service providers.

1 23. The method of claim 21, in which the step of receiving an indication that the  
2 customer has switched service providers comprises:  
3 determining a new customer of the second vendor; and



4 determining if the new customer had been offered a subsidy.

1 24. The method of claim 1, further comprising:

2 switching providers of a service that is provided to the customer.

1 25. The method of claim 24, in which the service comprises at least one of:

2 telephone service, Internet service, banking services, credit card account  
3 services, insurance service, securities trading service, utilities service, satellite  
4 television service, and cable television service.

1 26. The method of claim 1, further comprising:

2 initiating a new service agreement so that a particular service is provided to  
3 the customer by the second vendor.

1 27. The method of claim 26, in which the service comprises at least one of:

2 telephone service, Internet service, banking services, credit card account  
3 services, insurance service, securities trading service, utilities service, satellite  
4 television service, and cable television service.

1 28. The method of claim 1, further comprising:

2 facilitating a transaction between the customer and the second vendor.

1 29. The method of claim 1, further comprising:

2           soliciting agreement by the customer to participate in a transaction with the  
3   second vendor.

1   30.    The method of claim 29, further comprising:  
2           determining whether the customer participated in a transaction with the second  
3   vendor.

1   31.    The method of claim 29, further comprising:  
2           assessing a penalty if the customer did not participate in the transaction.

1   32.    The method of claim 1, in which the information relating to customer activity  
2   comprises an indication of at least one of:  
3           a mouse click on a predetermined portion of a Web page;  
4           a mouse click on a predetermined banner advertisement;  
5           a mouse click on an indication of an item;  
6           a mouse-over on a predetermined portion of a Web page; and  
7           mouse-overs on predetermined portions of Web pages at least a predetermined  
8   number of times.

1   33.    The method of claim 1, in which the information relating to customer activity  
2   comprises an indication of at least one of:  
3           a search that is performed for a predetermined product;  
4           accessing predetermined Web pages;  
5           accessing a predetermined number of predetermined Web pages;

6 accessing predetermined Web pages in a predetermined sequence;  
7 accessing predetermined Web pages during a predetermined time period;  
8 a duration that the Web site is open; and  
9 previous access to a predetermined Web site at least a predetermined number  
10 of times.

1 34. The method of claim 1, in which the information relating to customer activity  
2 comprises an indication of at least one of:  
3 a predetermined number of items that a customer is ready to purchase from the  
4 first vendor;  
5 a predetermined item that the customer is ready to purchase from the first  
6 vendor;  
7 a duration that an item is selected for purchase;  
8 requesting a coupon for a predetermined item;  
9 an item having at least a predetermined price that the customer is ready to  
10 purchase from the first vendor;  
11 at least a predetermined number of previous purchases from the first vendor;  
12 and  
13 frequent shopper status of the customer.

1 35. The method of claim 1, in which the offer defines at least one of:  
2 a reduction in the price charged for the at least one item;  
3 the second vendor; and  
4 an obligation for the customer to fulfill in exchange for the subsidy.

1 36. A method, comprising the steps of:  
 2 receiving information relating to customer activity with a first vendor;  
 3 determining whether to provide an offer for a subsidy based on the  
 4 information relating to customer activity;  
 5 determining an offer for a subsidy from a second vendor;  
 6 providing an indication of the offer for the subsidy from the second vendor;  
 7 receiving a response to the offer;  
 8 receiving an indication of at least one item the customer desires to purchase,  
 9 the at least one item having an associated total price; and  
 10 charging the customer a second price for the at least one item if the response  
 11 indicates that the offer is accepted, the second price being less than the total price.

1 37. A method, comprising the steps of:  
 2 receiving an indication of at least one item that a customer has purchased for a  
 3 total price from a first vendor;  
 4 receiving contact information of the customer;  
 5 determining an offer for a subsidy from a second vendor;  
 6 providing an indication of the offer using the contact information;  
 7 receiving a response to the offer;  
 8 receiving a credit card account identifier that identifies a credit card account;  
 9 and  
 10 crediting an amount of funds to the credit card account if the response  
 11 indicates that the offer is accepted.

1 38. The method of claim 37, further comprising:  
 2 determining if contact information of the customer is stored; and  
 3 requesting contact information of the customer if contact information of the  
 4 customer is not stored.

1 39. The method of claim 37, in which the step of receiving an indication of at least  
 2 one item that a customer has purchased comprises:  
 3 receiving an indication of items that a plurality of customers have purchased.

1 40. The method of claim 39, in which the step of receiving an indication of items  
 2 that a plurality of customers have purchased is performed at predetermined times.

1 41. A method, comprising the steps of:  
 2 receiving information relating to customer activity on a Web site of a first  
 3 vendor;  
 4 determining whether to provide an offer for a subsidy based on the  
 5 information relating to customer activity;  
 6 determining an offer for a subsidy from a second vendor;  
 7 displaying, via a Web page on the Web site, an indication of the offer for the  
 8 subsidy from the second vendor;  
 9 receiving customer input via the Web site, the customer input representing a  
 10 response to the offer;  
 11 receiving a selection of at least one item the customer desires to purchase, the  
 12 at least one item having an associated total price;

13 receiving a credit card identifier that identifies a credit card account; and  
14 charging a second price to the credit card account if the response indicates that  
15 the offer is accepted, the second price being less than the total price.

1 42. A method, comprising the steps of:  
2 receiving information relating to customer activity at a POS terminal of a first  
3 vendor;  
4 determining whether to provide an offer for a subsidy based on the  
5 information relating to customer activity;  
6 determining an offer for a subsidy from a second vendor;  
7 outputting at the POS terminal an indication of the offer for the subsidy from  
8 the second vendor;  
9 receiving customer input via the POS terminal, the customer input  
10 representing a response to the offer;  
11 receiving a selection of at least one item the customer desires to purchase, the  
12 at least one item having an associated total price;  
13 receiving a credit card identifier that identifies a credit card account; and  
14 charging a second price to the credit card account if the response indicates that  
15 the offer is accepted, the second price being less than the total price.

1 43. A method, comprising the steps of:  
2 receiving information relating to customer activity with an IVRU of a first  
3 vendor;

4 determining whether to provide an offer for a subsidy based on the  
5 information relating to customer activity;  
6 determining an offer for a subsidy from a second vendor;  
7 transmitting via the IVRU an indication of the offer for the subsidy from the  
8 second vendor;  
9 receiving via the IVRU a customer input that represents a response to the  
10 offer;  
11 receiving via the IVRU a selection of at least one item the customer desires to  
12 purchase, the at least one item having an associated total price;  
13 receiving via the IVRU a credit card identifier that identifies a credit card  
14 account; and  
15 charging a second price to the credit card account if the response indicates that  
16 the offer is accepted, the second price being less than the total price.

1 44. A method, comprising the steps of:  
2 receiving information relating to customer activity of a customer with a first  
3 vendor;  
4 determining whether to provide an offer for a subsidy based on the  
5 information relating to customer activity;  
6 determining an offer for a subsidy from a second vendor, the offer defining an  
7 obligation for the customer to fulfill in exchange for the subsidy;  
8 providing an indication of the offer for the subsidy from the second vendor;  
9 receiving an indication of at least one item the customer desires to purchase,  
10 the at least one item having an associated total price;

11 receiving a credit card account identifier that identifies a credit card account;  
12 charging a second price to the credit card account, the second price being less  
13 than the total price;  
14 determining whether the customer has fulfilled the obligation; and  
15 charging a discount amount to the credit card account if the customer has not  
16 fulfilled the obligation, the discount amount being based on a difference between the  
17 total price and the second price.

1 45. The method of claim 44, in which the step of determining whether the  
2 customer has fulfilled the obligation comprises:  
3 receiving an indication that the customer has switched service providers.

1 46. The method of claim 44, in which the step of determining whether the  
2 customer has fulfilled the obligation comprises:  
3 determining whether the customer has become a new customer of the second  
4 vendor.

1 47. The method of claim 44, in which the step of charging a second price to the  
2 credit card account comprises:  
3 charging the second price to the credit card account in one transaction.

1 48. The method of claim 44, in which the step of charging a second price to the  
2 credit card account comprises:  
3 charging the total price to the credit card account; and



4           crediting the discount amount to the credit card account.

1   49.    A method, comprising the steps of:

2           receiving information relating to customer activity of a customer with a first  
3   vendor;

4           providing, in response to the received indication, an indication of an offer for a  
5   subsidy from a second vendor;

6           receiving an indication of at least one item the customer desires to purchase,  
7   the at least one item having an associated total price;

8           receiving a response to the offer; and

9           providing the at least one item to the customer for free if the response  
10   indicates acceptance of the offer.

1   50.    The method of claim 49, further comprising:

2           providing a credit to the customer if the response indicates acceptance of the  
3   offer.

1   51.    An apparatus, comprising:

2           means for receiving information relating to customer activity of a customer  
3   with a first vendor;

4           means for providing, in response to the received information, an indication of  
5   an offer for a subsidy from a second vendor;

6           means for receiving an indication of at least one item the customer desires to  
7   purchase, the at least one item having an associated total price; and



8 receiving an indication of at least one item the customer desires to purchase,  
9 the at least one item having an associated total price; and  
10 charging the customer a second price for the at least one item if the offer is  
11 accepted, the second price being less than the total price.

1 54. An apparatus, comprising:  
2 means for receiving information relating to customer activity with a first  
3 vendor;  
4 means for determining whether to provide an offer for a subsidy based on the  
5 information relating to customer activity;  
6 means for determining an offer for a subsidy from a second vendor;  
7 means for providing an indication of the offer for the subsidy from the second  
8 vendor;  
9 means for receiving a response to the offer;  
10 means for receiving an indication of at least one item the customer desires to  
11 purchase, the at least one item having an associated total price; and  
12 means for charging the customer a second price for the at least one item if the  
13 response indicates that the offer is accepted, the second price being less than the total  
14 price.

1 55. An apparatus, comprising:  
2 a data storage device; and  
3 a processor connected to the data storage device,  
4 the data storage device storing a program for controlling the processor; and

5 the processor operative with the program to:

6 receive information relating to customer activity with a first vendor;

7 determine whether to provide an offer for a subsidy based on the

8 information relating to customer activity;

9 determine an offer for a subsidy from a second vendor;

10 provide an indication of the offer for the subsidy from the second

11 vendor;

12 receive a response to the offer;

13 receive an indication of at least one item the customer desires to

14 purchase, the at least one item having an associated total price; and

15 charge the customer a second price for the at least one item if the

16 response indicates that the offer is accepted, the second price being less than the total

17 price.

1 56. A computer readable medium encoded with processing instructions for

2 implementing a method performed by a computer, the method comprising the steps

3 of:

4 receiving information relating to customer activity with a first vendor;

5 determining whether to provide an offer for a subsidy based on the

6 information relating to customer activity;

7 determining an offer for a subsidy from a second vendor;

8 providing an indication of the offer for the subsidy from the second vendor;

9 receiving a response to the offer;

10 receiving an indication of at least one item the customer desires to purchase,  
11 the at least one item having an associated total price; and  
12 charging the customer a second price for the at least one item if the response  
13 indicates that the offer is accepted, the second price being less than the total price.

1 57. An apparatus, comprising:

2 means for receiving an indication of at least one item that a customer has  
3 purchased for a total price from a first vendor;

4 means for receiving contact information of the customer;

5 means for determining an offer for a subsidy from a second vendor;

6 means for providing an indication of the offer using the contact information;

7 means for receiving a response to the offer;

8 means for receiving a credit card account identifier that identifies a credit card  
9 account; and

10 means for crediting an amount of funds to the credit card account if the  
11 response indicates that the offer is accepted.

1 58. An apparatus, comprising:

2 a data storage device; and

3 a processor connected to the data storage device,

4 the data storage device storing a program for controlling the processor; and

5 the processor operative with the program to:

6 receive an indication of at least one item that a customer has purchased  
7 for a total price from a first vendor;

8 receive contact information of the customer;  
9 determine an offer for a subsidy from a second vendor;  
10 provide an indication of the offer using the contact information;  
11 receive a response to the offer;  
12 receive a credit card account identifier that identifies a credit card  
13 account; and  
14 credit an amount of funds to the credit card account if the response  
15 indicates that the offer is accepted.

1 59. A computer readable medium encoded with processing instructions for  
2 implementing a method performed by a computer, the method comprising the steps  
3 of:  
4 receiving an indication of at least one item that a customer has purchased for a  
5 total price from a first vendor;  
6 receiving contact information of the customer;  
7 determining an offer for a subsidy from a second vendor;  
8 providing an indication of the offer using the contact information;  
9 receiving a response to the offer;  
10 receiving a credit card account identifier that identifies a credit card account;  
11 and  
12 crediting an amount of funds to the credit card account if the response  
13 indicates that the offer is accepted.

1 60. An apparatus, comprising:

2 means for receiving information relating to customer activity on a Web site of  
3 a first vendor;

4 means for determining whether to provide an offer for a subsidy based on the  
5 information relating to customer activity;

6 means for determining an offer for a subsidy from a second vendor;

7 means for displaying, via a Web page on the Web site, an indication of the  
8 offer for the subsidy from the second vendor;

9 means for receiving customer input via the Web site, the customer input  
10 representing a response to the offer;

11 means for receiving a selection of at least one item the customer desires to  
12 purchase, the at least one item having an associated total price;

13 means for receiving a credit card identifier that identifies a credit card account;

14 and

15 means for charging a second price to the credit card account if the response  
16 indicates that the offer is accepted, the second price being less than the total price.

1 61. An apparatus, comprising:

2 a data storage device; and

3 a processor connected to the data storage device,

4 the data storage device storing a program for controlling the processor; and

5 the processor operative with the program to:

6 receive information relating to customer activity on a Web site of a  
7 first vendor;

8                   determine whether to provide an offer for a subsidy based on the  
9   information relating to customer activity;  
10                  determine an offer for a subsidy from a second vendor;  
11                  display, via a Web page on the Web site, an indication of the offer for  
12   the subsidy from the second vendor;  
13                  receive customer input via the Web site, the customer input  
14   representing a response to the offer;  
15                  receive a selection of at least one item the customer desires to  
16   purchase, the at least one item having an associated total price;  
17                  receive a credit card identifier that identifies a credit card account; and  
18                  charge a second price to the credit card account if the response  
19   indicates that the offer is accepted, the second price being less than the total price.

1   62.    A computer readable medium encoded with processing instructions for  
2   implementing a method performed by a computer, the method comprising the steps  
3   of:  
4            receiving information relating to customer activity on a Web site of a first  
5   vendor;  
6            determining whether to provide an offer for a subsidy based on the  
7   information relating to customer activity;  
8            determining an offer for a subsidy from a second vendor;  
9            displaying, via a Web page on the Web site, an indication of the offer for the  
10   subsidy from the second vendor;



11 receiving customer input via the Web site, the customer input representing a  
12 response to the offer;  
13 receiving a selection of at least one item the customer desires to purchase, the  
14 at least one item having an associated total price;  
15 receiving a credit card identifier that identifies a credit card account; and  
16 charging a second price to the credit card account if the response indicates that  
17 the offer is accepted, the second price being less than the total price.

1 63. An apparatus, comprising:  
2 means for receiving information relating to customer activity at a POS  
3 terminal of a first vendor;  
4 means for determining whether to provide an offer for a subsidy based on the  
5 information relating to customer activity;  
6 means for determining an offer for a subsidy from a second vendor;  
7 means for outputting at the POS terminal an indication of the offer for the  
8 subsidy from the second vendor;  
9 means for receiving customer input via the POS terminal, the customer input  
10 representing a response to the offer;  
11 means for receiving a selection of at least one item the customer desires to  
12 purchase, the at least one item having an associated total price;  
13 means for receiving a credit card identifier that identifies a credit card account;  
14 and  
15 means for charging a second price to the credit card account if the response  
16 indicates that the offer is accepted, the second price being less than the total price.

1 64. An apparatus, comprising:  
2 a data storage device; and  
3 a processor connected to the data storage device,  
4 the data storage device storing a program for controlling the processor; and  
5 the processor operative with the program to:  
6 receive information relating to customer activity at a POS terminal of a  
7 first vendor;  
8 determine whether to provide an offer for a subsidy based on the  
9 information relating to customer activity;  
10 determine an offer for a subsidy from a second vendor;  
11 output at the POS terminal an indication of the offer for the subsidy  
12 from the second vendor;  
13 receive customer input via the POS terminal, the customer input  
14 representing a response to the offer;  
15 receive a selection of at least one item the customer desires to  
16 purchase, the at least one item having an associated total price;  
17 receive a credit card identifier that identifies a credit card account; and  
18 charge a second price to the credit card account if the response  
19 indicates that the offer is accepted, the second price being less than the total price.

1 65. A computer readable medium encoded with processing instructions for  
2 implementing a method performed by a computer, the method comprising the steps  
3 of:

4 receiving information relating to customer activity at a POS terminal of a first  
5 vendor;  
6 determining whether to provide an offer for a subsidy based on the  
7 information relating to customer activity;  
8 determining an offer for a subsidy from a second vendor;  
9 outputting at the POS terminal an indication of the offer for the subsidy from  
10 the second vendor;  
11 receiving customer input via the POS terminal, the customer input  
12 representing a response to the offer;  
13 receiving a selection of at least one item the customer desires to purchase, the  
14 at least one item having an associated total price;  
15 receiving a credit card identifier that identifies a credit card account; and  
16 charging a second price to the credit card account if the response indicates that  
17 the offer is accepted, the second price being less than the total price.

1 66. An apparatus, comprising:  
2 means for receiving information relating to customer activity with an IVRU of  
3 a first vendor;  
4 means for determining whether to provide an offer for a subsidy based on the  
5 information relating to customer activity;  
6 determining an offer for a subsidy from a second vendor;  
7 means for transmitting via the IVRU an indication of the offer for the subsidy  
8 from the second vendor;

9 means for receiving via the IVRU a customer input that represents a response  
10 to the offer;  
11 means for receiving via the IVRU a selection of at least one item the customer  
12 desires to purchase, the at least one item having an associated total price;  
13 means for receiving via the IVRU a credit card identifier that identifies a  
14 credit card account; and  
15 means for charging a second price to the credit card account if the response  
16 indicates that the offer is accepted, the second price being less than the total price.

1 67. An apparatus, comprising:  
2 a data storage device; and  
3 a processor connected to the data storage device,  
4 the data storage device storing a program for controlling the processor; and  
5 the processor operative with the program to:  
6 receive information relating to customer activity with an IVRU of a  
7 first vendor;  
8 determine whether to provide an offer for a subsidy based on the  
9 information relating to customer activity;  
10 determine an offer for a subsidy from a second vendor;  
11 transmit via the IVRU an indication of the offer for the subsidy from  
12 the second vendor;  
13 receive via the IVRU a customer input that represents a response to the  
14 offer;

15                   receive via the IVRU a selection of at least one item the customer  
16 desires to purchase, the at least one item having an associated total price;  
17                   receive via the IVRU a credit card identifier that identifies a credit card  
18 account; and  
19                   charge a second price to the credit card account if the response  
20 indicates that the offer is accepted, the second price being less than the total price.

1   68.    A computer readable medium encoded with processing instructions for  
2   implementing a method performed by a computer, the method comprising the steps  
3   of:  
4            receiving information relating to customer activity with an IVRU of a first  
5   vendor;  
6            determining whether to provide an offer for a subsidy based on the  
7   information relating to customer activity;  
8            determining an offer for a subsidy from a second vendor;  
9            transmitting via the IVRU an indication of the offer for the subsidy from the  
10 second vendor;  
11           receiving via the IVRU a customer input that represents a response to the  
12 offer;  
13           receiving via the IVRU a selection of at least one item the customer desires to  
14 purchase, the at least one item having an associated total price;  
15           receiving via the IVRU a credit card identifier that identifies a credit card  
16 account; and

17 charging a second price to the credit card account if the response indicates that  
18 the offer is accepted, the second price being less than the total price.

1 69. An apparatus, comprising:

2 means for receiving information relating to customer activity of a customer  
3 with a first vendor;

4 means for determining whether to provide an offer for a subsidy based on the  
5 information relating to customer activity;

6 means for determining an offer for a subsidy from a second vendor, the offer  
7 defining an obligation for the customer to fulfill in exchange for the subsidy;

8 means for providing an indication of the offer for the subsidy from the second  
9 vendor;

10 means for receiving an indication of at least one item the customer desires to  
11 purchase, the at least one item having an associated total price;

12 means for receiving a credit card account identifier that identifies a credit card  
13 account;

14 means for charging a second price to the credit card account, the second price  
15 being less than the total price;

16 means for determining whether the customer has fulfilled the obligation; and

17 means for charging a discount amount to the credit card account if the  
18 customer has not fulfilled the obligation, the discount amount being based on a  
19 difference between the total price and the second price.

1 70. An apparatus, comprising:

2 a data storage device; and

3 a processor connected to the data storage device,

4 the data storage device storing a program for controlling the processor; and

5 the processor operative with the program to:

6 receive information relating to customer activity of a customer with a

7 first vendor;

8 determine whether to provide an offer for a subsidy based on the

9 information relating to customer activity;

10 determine an offer for a subsidy from a second vendor, the offer

11 defining an obligation for the customer to fulfill in exchange for the subsidy;

12 provide an indication of the offer for the subsidy from the second

13 vendor;

14 receive an indication of at least one item the customer desires to

15 purchase, the at least one item having an associated total price;

16 receive a credit card account identifier that identifies a credit card

17 account;

18 charge a second price to the credit card account, the second price being

19 less than the total price;

20 determine whether the customer has fulfilled the obligation; and

21 charge a discount amount to the credit card account if the customer has

22 not fulfilled the obligation, the discount amount being based on a difference between

23 the total price and the second price.

1 71. A computer readable medium encoded with processing instructions for  
2 implementing a method performed by a computer, the method comprising the steps  
3 of:  
4 receiving information relating to customer activity of a customer with a first  
5 vendor;  
6 determining whether to provide an offer for a subsidy based on the  
7 information relating to customer activity;  
8 determining an offer for a subsidy from a second vendor, the offer defining an  
9 obligation for the customer to fulfill in exchange for the subsidy;  
10 providing an indication of the offer for the subsidy from the second vendor;  
11 receiving an indication of at least one item the customer desires to purchase,  
12 the at least one item having an associated total price;  
13 receiving a credit card account identifier that identifies a credit card account;  
14 charging a second price to the credit card account, the second price being less  
15 than the total price;  
16 determining whether the customer has fulfilled the obligation; and  
17 charging a discount amount to the credit card account if the customer has not  
18 fulfilled the obligation, the discount amount being based on a difference between the  
19 total price and the second price.

1 72. An apparatus, comprising:  
2 means for receiving information relating to customer activity of a customer  
3 with a first vendor;



4 means for providing, in response to the received indication, an indication of an  
5 offer for a subsidy from a second vendor;

6 means for receiving an indication of at least one item the customer desires to  
7 purchase, the at least one item having an associated total price;

8 means for receiving a response to the offer; and

9 means for providing the at least one item to the customer for free if the  
10 response indicates acceptance of the offer.

1 73. An apparatus, comprising:

2 a data storage device; and

3 a processor connected to the data storage device,

4 the data storage device storing a program for controlling the processor; and

5 the processor operative with the program to:

6 receive information relating to customer activity of a customer with a  
7 first vendor;

8 provide, in response to the received indication, an indication of an  
9 offer for a subsidy from a second vendor;

10 receive an indication of at least one item the customer desires to  
11 purchase, the at least one item having an associated total price;

12 receive a response to the offer; and

13 provide the at least one item to the customer for free if the response  
14 indicates acceptance of the offer.

1 74. A computer readable medium encoded with processing instructions for  
2 implementing a method performed by a computer, the method comprising the steps  
3 of:  
4 receiving information relating to customer activity of a customer with a first  
5 vendor;  
6 providing, in response to the received indication, an indication of an offer for a  
7 subsidy from a second vendor;  
8 receiving an indication of at least one item the customer desires to purchase,  
9 the at least one item having an associated total price;  
10 receiving a response to the offer; and  
11 providing the at least one item to the customer for free if the response  
12 indicates acceptance of the offer.

## ABSTRACT OF THE DISCLOSURE

In accordance with the present invention, a controller receives information relating to customer activity with a first vendor, typically via a Web page that a customer accesses. The controller further receives an indication of items the customer desires to purchase, the items having an associated total price. The controller determines, based on any of various criteria, whether to provide an offer for a subsidy based on the information relating to customer activity. For example, a customer that places certain items in his virtual shopping cart may receive such an offer. The offer for a subsidy is from a second vendor (a subsidizing vendor), and may define, for example, a reduction in the price charged for the item and an obligation for the customer to fulfill in exchange for the subsidy. For example, the customer may be obliged to sign up for a credit card or telephone service provided by the subsidizing vendor. An indication of the offer for the subsidy is provided to the customer, e.g., via a text or graphical display on the Web page. The customer responds via known user interface techniques and, if he accepts the offer, he is charged a second price for the items. The second price is less than the total price, and may even be zero. Thus the customer may get his desired items for free in exchange for fulfilling the obligation with the subsidizing vendor.

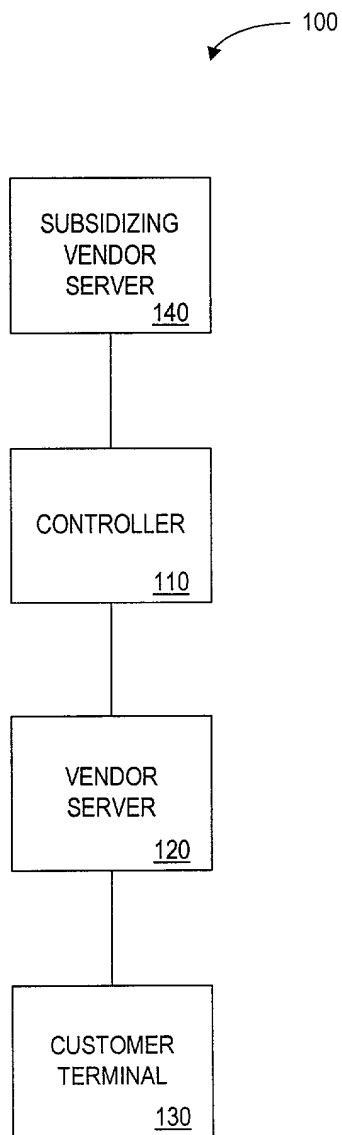


FIG. 1A

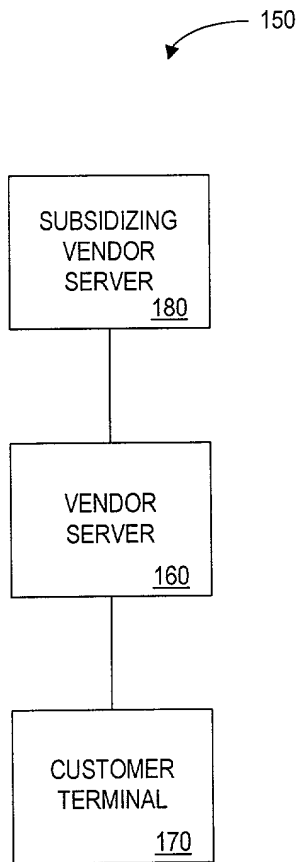


FIG. 1B

200

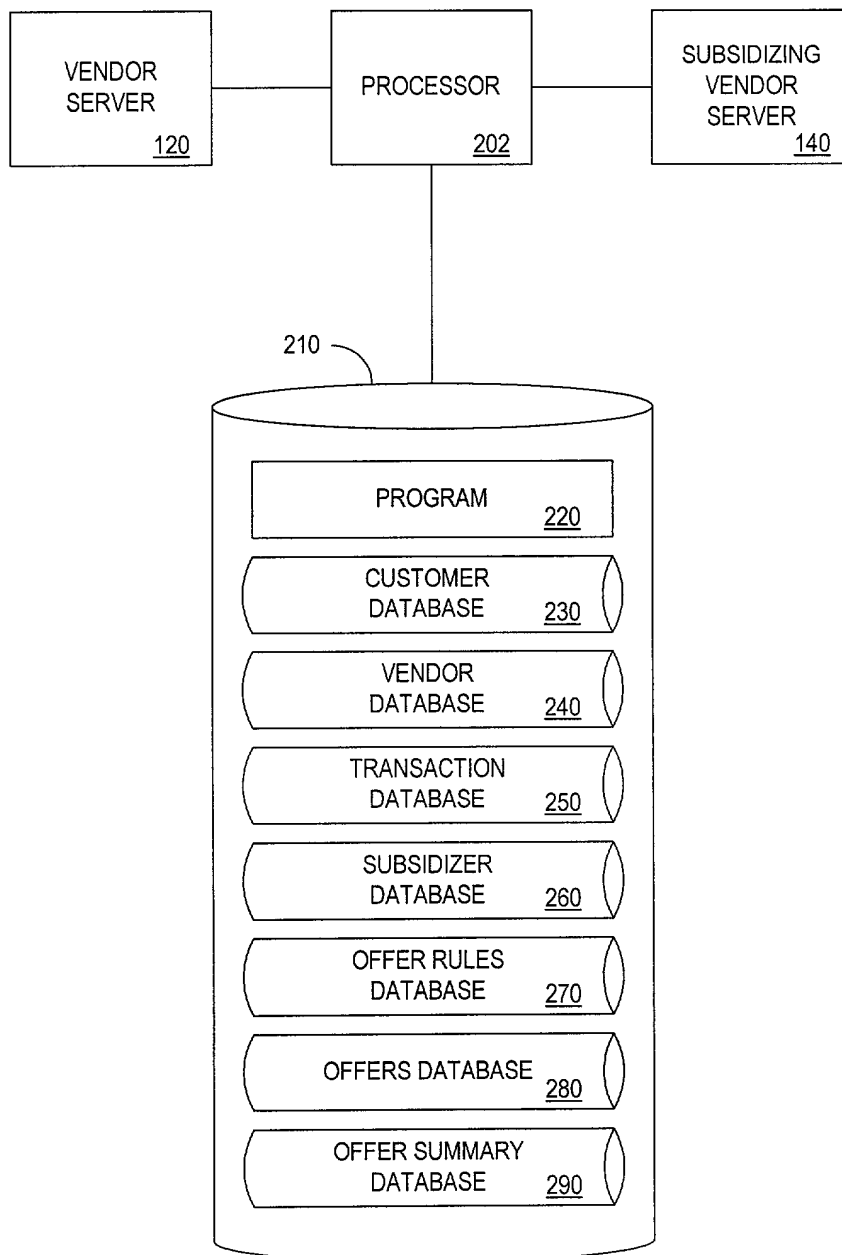


FIG. 2

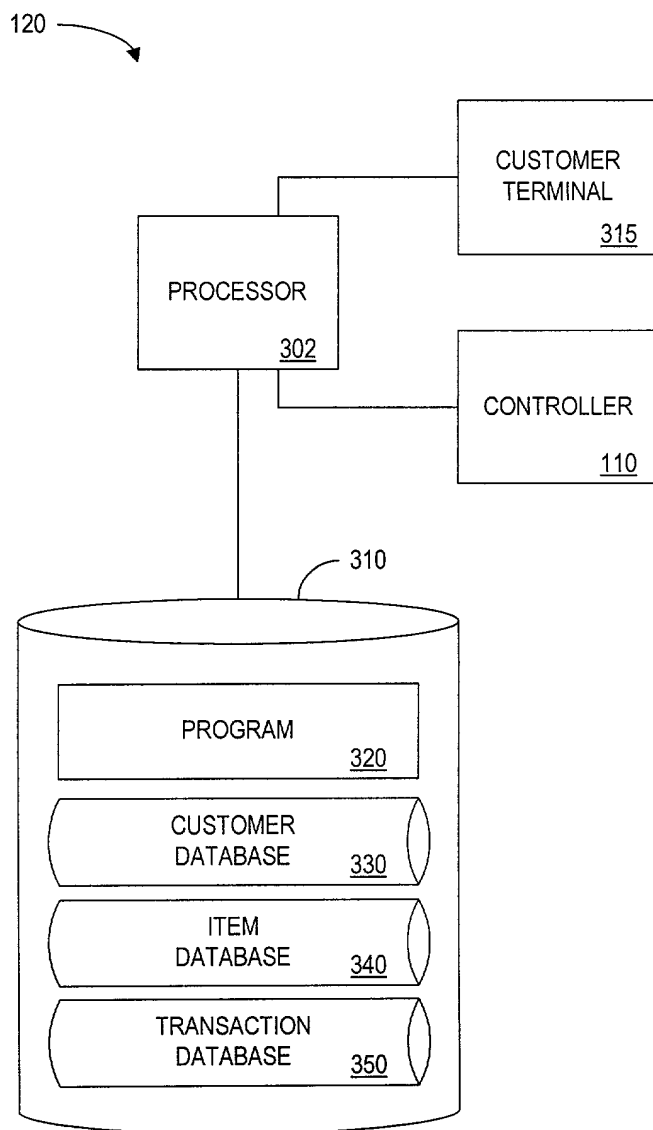


FIG. 3

SECRET 0319

400

CUSTOMER IDENTIFIER 420	NAME 422	BILLING ADDRESS 424	CREDIT CARD INFORMATION 426	E-MAIL 428
C0001	DAN MANN	123 MAIN ST.	VISA 1111-1111-1111-1111	DMANN@ISP.COM
C0002	STEVE DAVIS	3 RIVERPLACE ROAD	AMEX 4444-5555-6666-3333	SDAVIS@SCHOOL.EDU
C0003	JEFF SMITH	2 THRUSH LANE	DIS 2222-3333-4444-7777	SMITH@WEBTV.COM
C0004	GEORGE ALAN	15 LAUREL AVENUE	VISA 1111-4444-8888-3333	ALAN@WORK.COM

402  
404  
406  
408

FIG. 4



500

VENDOR IDENTIFIER 520	VENDOR NAME 522	VENDOR E-MAIL ADDRESS 524	AMOUNT OWED TO VENDOR 526
V001	VENDOR X	X@X.COM	\$0.00
V002	VENDOR Y	Y@Y.COM	\$100.00
V003	VENDOR Z	Z@Z.COM	\$987.13
V004	VENDOR Q	Q@Q.COM	\$45.00

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504

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FIG. 5

600						
TRANSACTION IDENTIFIER 620	TIME OF TRANSACTION 622	ITEMS ORDERED 624	CREDIT CARD INFORMATION 626	AMOUNT CHARGED 628	DELIVERY ADDRESS 630	CUSTOMER IDENTIFIER 632
T 000 001	1/4/2001 8:07 AM	P038, P049, P812	VISA 1111-1111- 1111-1111 EXP. 3/2002	\$49.87	123 MAIN ST. TOWN, USA	NONE
T 000 002	1/9/2001 9:00 PM	P123	MASTERCARD 2222-2222- 2222-2222 EXP. 9/2002	\$0.00	9876 PARK AVE. CITY, USA	C1234
T 000 003	1/10/2001 3:02 AM	P456, P789, P789	AMEX 9999-9999- 9999-9999 EXP. 4/2005	\$0.00	24 SHADY LA. TOWN, USA	C5678

FIG. 6

66160" 2425250

700

<div>702</div> <div>SUBSIDIZING VENDOR IDENTIFIER</div> <div>720</div>	<div>704</div> <div>SUBSIDIZING VENDOR NAME</div> <div>722</div>	<div>706</div> <div>ACCOUNT</div> <div>724</div>	<div>AMOUNT OWED BY SUBSIDIZING VENDOR</div> <div>726</div>	<div>RANK</div> <div>728</div>
S001	CREDIT CARD COMPANY X	BANK ACCOUNT #2345678	\$855.00	1
S002	LONG DISTANCE TELEPHONE Y	MC 1111-2222- 3333-4444	\$4,390.00	2
S003	SATELLITE TELEVISION Z	PREPAID BALANCE \$10,500	\$0	3

FIG. 7

800

OFFER RULE IDENTIFIER 820	SUBSIDIZING VENDOR IDENTIFIER 822	CUSTOMER ACTIVITY 824	SUBSIDY AMOUNT 826	WHEN EFFECTIVE 828	ADDITIONAL TRANSACTION REQUIRED 830
R0001	S11	PUT ITEMS IN SHOPPING CART	UP TO \$50	ALWAYS	SIGN UP FOR CREDIT CARD ACCOUNT
R0002	S12	ACCESS WEB SITE 101	UP TO \$50	PURCHASING ITEM P004	SIGN UP FOR INTERNET ACCESS ACCOUNT
R0003	S12	ACCESS WEB SITE 102 FROM WEB SITE 103	\$40	CREDIT CARD = VISA AND TOTAL PRICE > \$100	SIGN UP FOR VISA PLUS ACCOUNT
R0004	213	READY TO PURCHASE AT LEAST \$100 OF ITEMS	\$100	CUSTOMER IS FROM A NEW ENGLAND STATE	SIGN UP FOR CELLULAR TELEPHONE SERVICE
R0005	S14	DOWNLOAD COUPONS FROM A RETAIL KIOSK	\$75	CUSTOMER DOES NOT HAVE CABLE TELEVISION FROM SERVICE PROVIDER	SIGN UP FOR CABLE TELEVISION

802

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810

FIG. 8

900

OFFER IDENTIFIER 920	TRANSACTION IDENTIFIER 922	SUBSIDIZING VENDOR IDENTIFIER 924	OFFER RULE APPLIED 926	WHEN OFFERED 928	EXPIRATION DATE 930	SUBSIDY AMOUNT 932	TOTAL PRICE 934	TOTAL PRICE WITH SUBSIDY 936	WHEN ACCEPTED 938
F001	T000000123	S111	R1230	8:15 AM 1/3/2001	--	\$50	\$97.12	\$47.12	8:15 AM 1/3/2001
F002	T000000456	S222	R4561	1:01 PM 1/4/2001	--	\$100	\$19.95	\$19.95	REJECTED
F003	T000000789	S345	R7892	3:09 PM 1/8/2001	11:59 PM 1/15/2001	\$10	\$10.00	\$0	11:10 AM 1/14/2001
F004	T000000109	S678	R0123	8:00 PM 1/12/2001	11:59 PM 1/22/2001	\$15	\$15.00	\$0	10:09 AM 1/20/2001
F005	T000000555	S901	R3454	12:35 AM 1/12/2001	11:59 PM 2/12/2001	\$75	\$48.00	\$0	OFFER STILL OPEN

902

904

906

908

910

FIG. 9

1000

SUBSIDIZING VENDOR IDENTIFIER: S888				1002
TOTAL NUMBER OF OFFERS: 1,794				1004
TOTAL NUMBER OF OFFERS ACCEPTED: 1,003				1006
TOTAL AMOUNT OF SUBSIDIES: \$52,800.00				1008
OFFER RULE IDENTIFIER 1020	NUMBER OF OFFERS 1022	NUMBER OF OFFERS ACCEPTED 1024	AMOUNT OF SUBSIDIES DUE 1026	
R1111	1004	500	\$2,500.00	
R2222	790	503	\$50,300.00	

1010

1012

FIG. 10

1100

1102	OFFER RULE IDENTIFIER R 3333			
	CUSTOMER ACTIVITY 1120	NUMBER OF OFFERS 1122	NUMBER OF OFFERS ACCEPTED 1124	ACCEPTANCE RATE 1126
1104	PUT ITEMS IN SHOPPING CART	87	48	55%
1106	ACCESS WEB PAGE 9876	39	19	49%
1108	CLICK ON "PRODUCT INFORMATION" BUTTON	45	20	44%

FIG. 11

1200

ITEM IDENTIFIER <u>1220</u>	ITEM DESCRIPTION <u>1222</u>	ITEM PRICE <u>1224</u>	AVAILABILITY <u>1226</u>
P001	WAR AND PEACE	\$13.95	IN STOCK
P002	SUN TZU: THE ART OF WAR	\$15.95	AVAILABLE IN 2-3 DAYS

1202

1204

FIG. 12



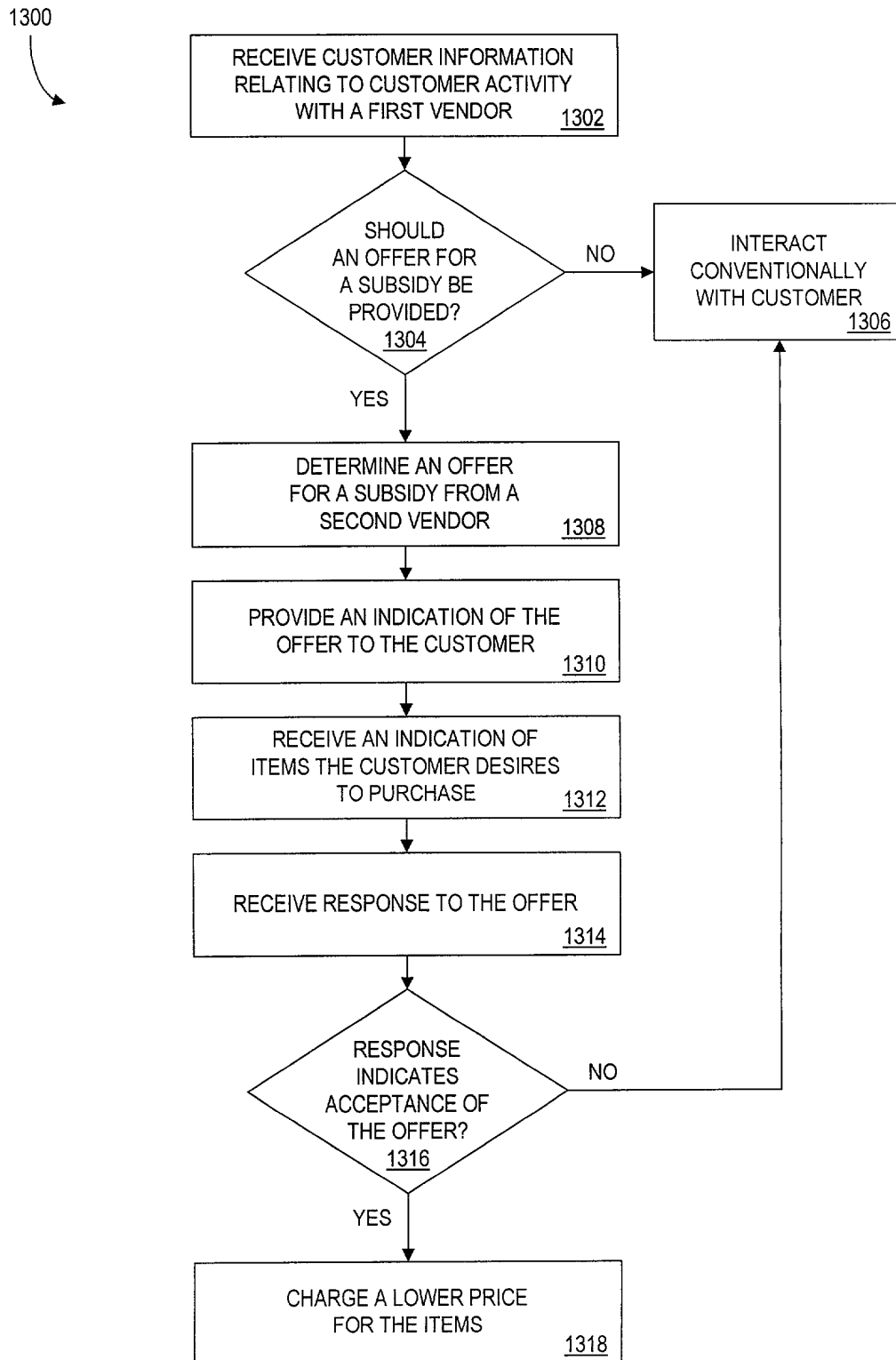


FIG. 13

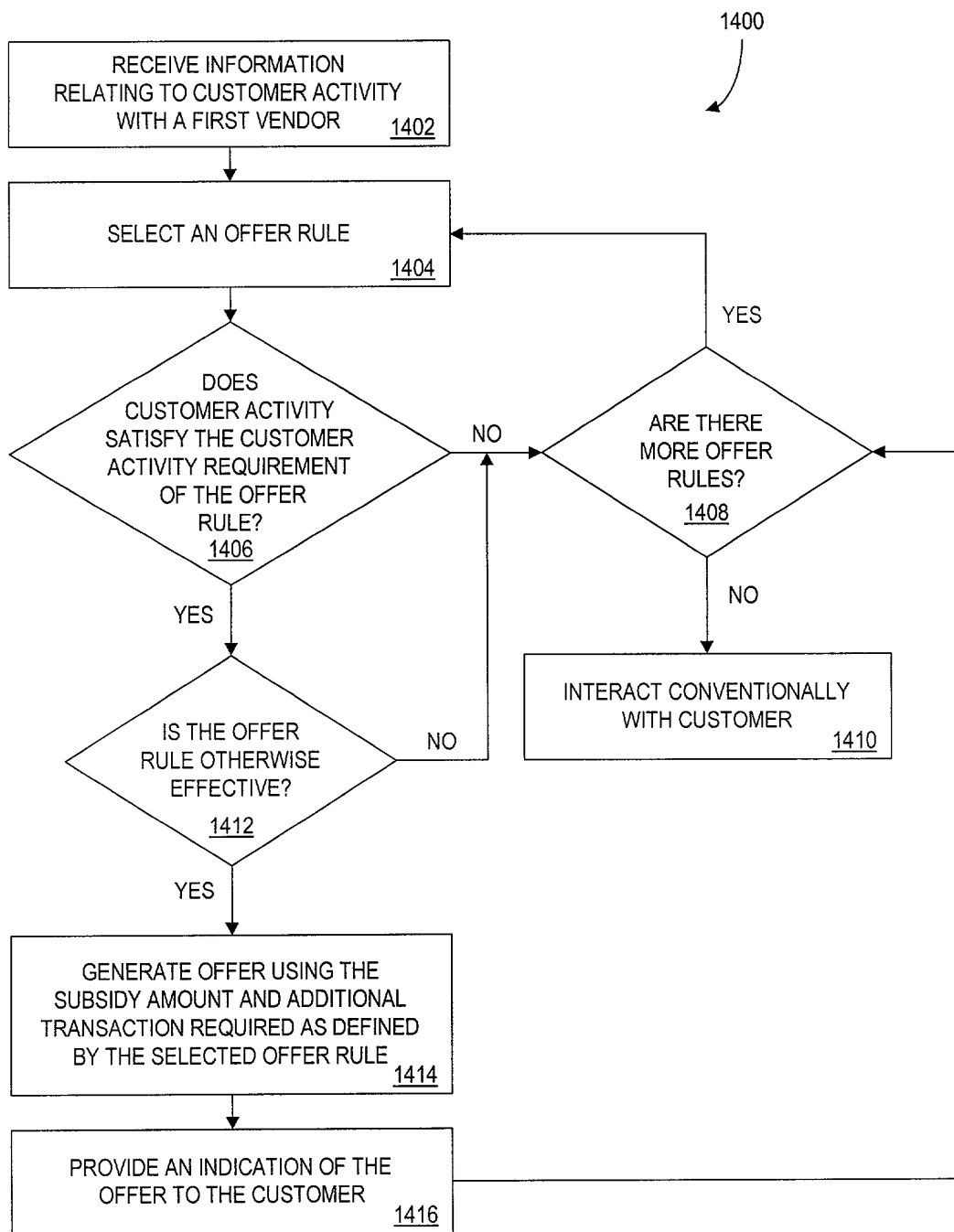
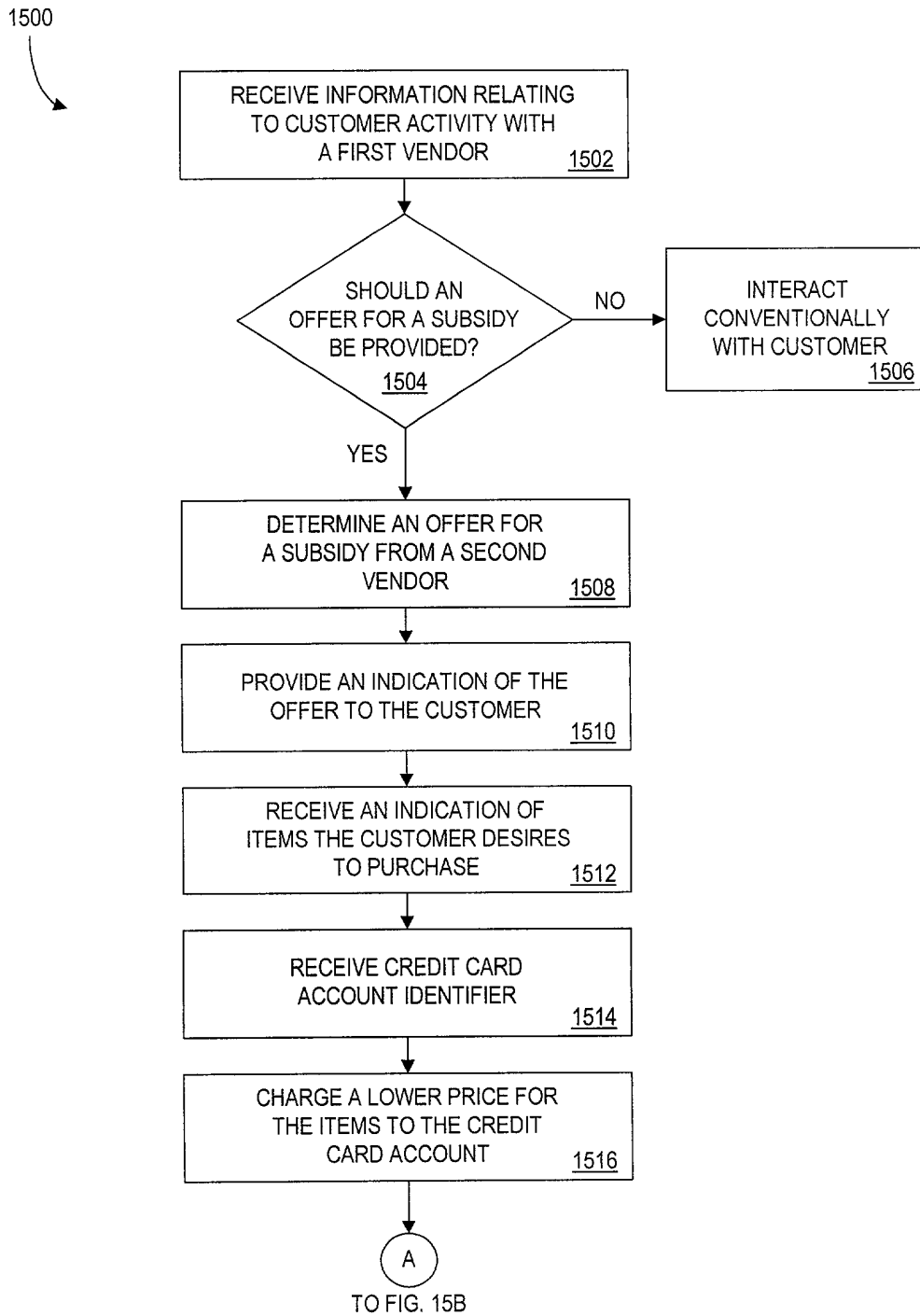


FIG. 14



FROM FIG. 15A

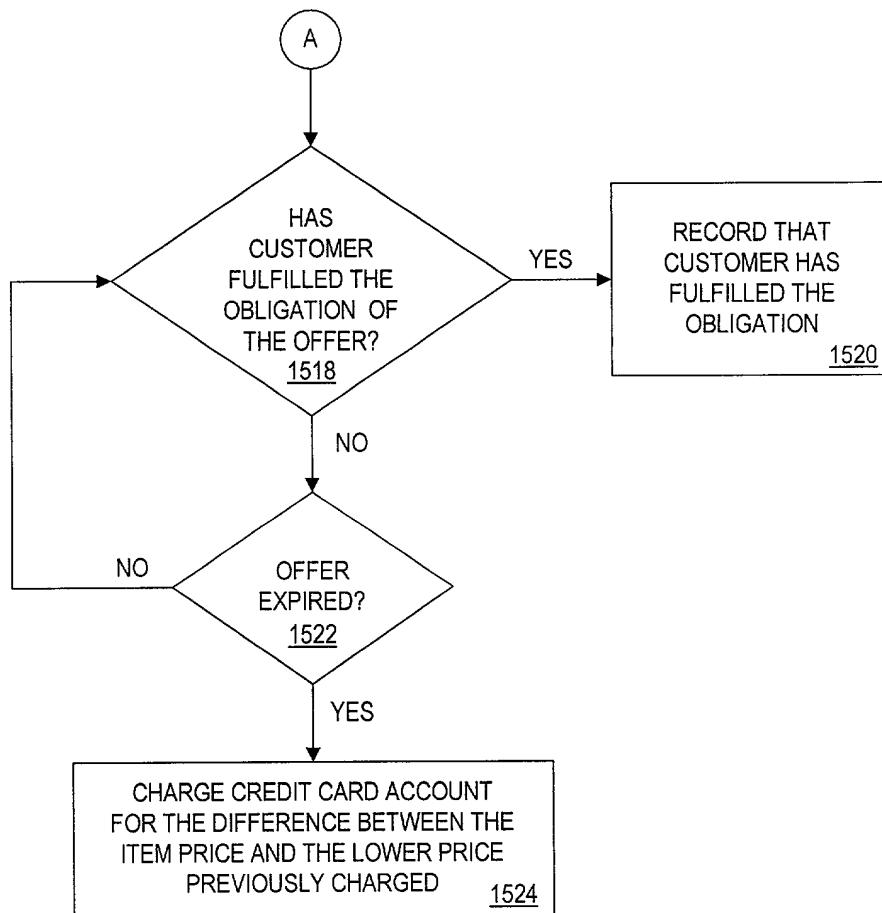


FIG. 15B

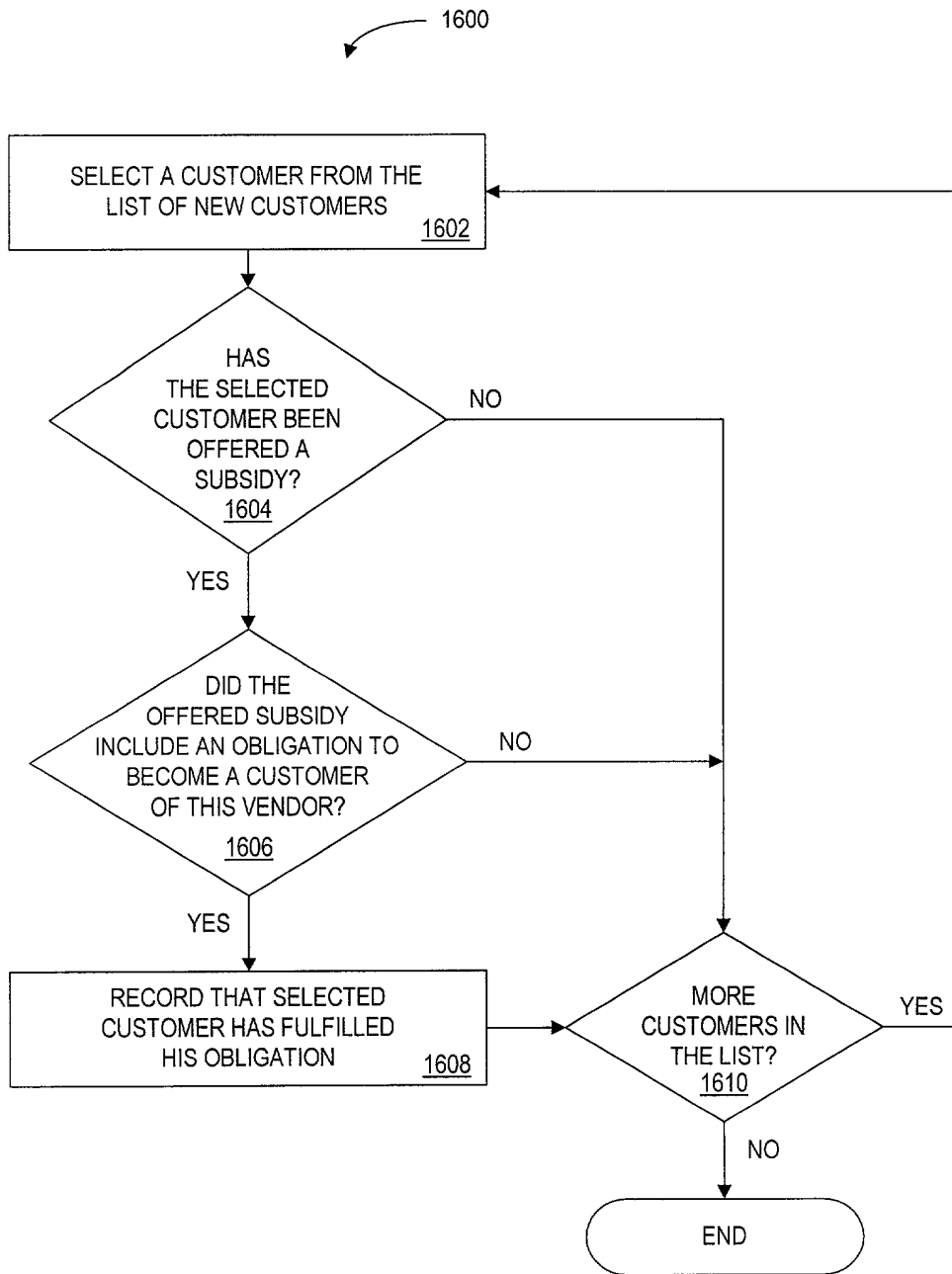


FIG. 16

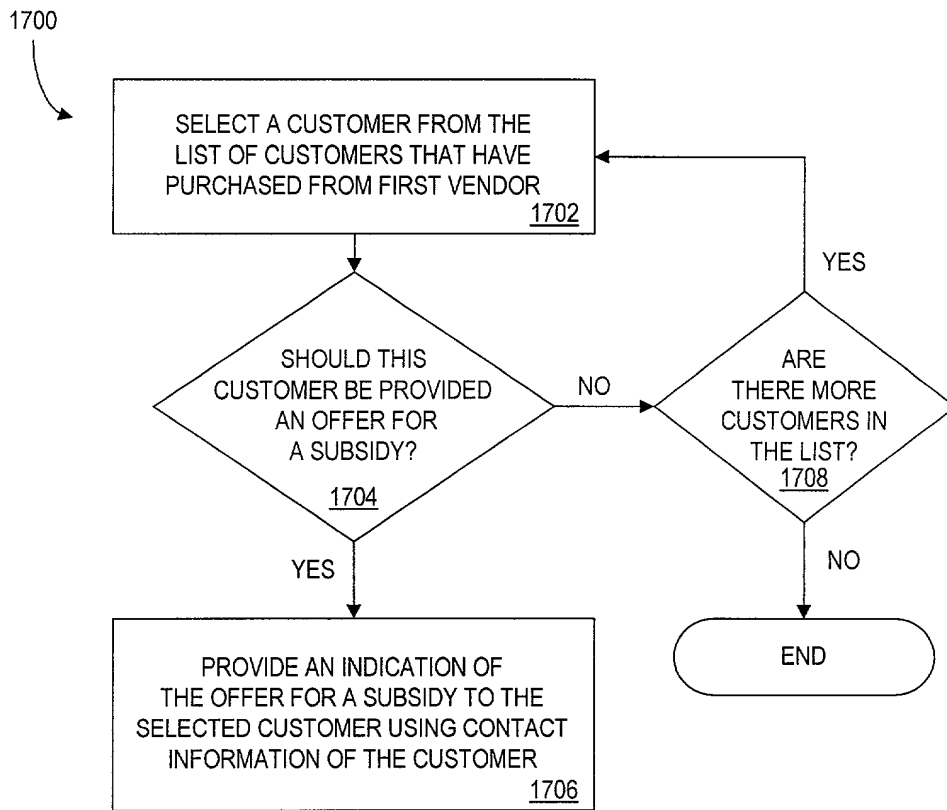


FIG. 17

Docket No.  
WD2-99-007

# Declaration and Power of Attorney For Patent Application

## English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**METHOD AND APPARATUS FOR PROVIDING CROSS-BENEFITS BASED ON A CUSTOMER ACTIVITY**

the specification of which

(check one)

☒ is attached hereto.

☐ was filed on \_\_\_\_\_ as United States Application No. or PCT International

Application Number \_\_\_\_\_

and was amended on \_\_\_\_\_

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Priority Not Claimed

_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/>
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/>
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/>

I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) listed below:

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

I hereby claim the benefit under 35 U. S. C. Section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, C. F. R., Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

09/219,267

12/23/98

Pending

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented, pending, abandoned)

09/xxx,xxx

3/22/99

Pending

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented, pending, abandoned)

09/116,367

10/5/98

Pending

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. *(list name and registration number)*

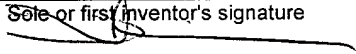
**Dean Alderucci - PTO Reg. No. 40,484**

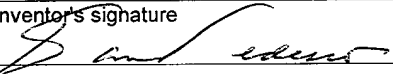
**Jeffrey L. Brandt - PTO Reg. No. 31,490**

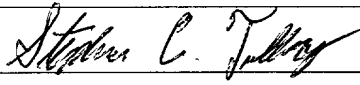
**Charles A. Rattner - PTO Reg. No. 40,136**

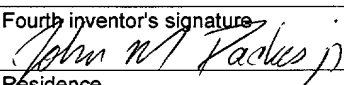
Send Correspondence to: **Dean Alderucci**  
**Walker Digital Corporation**  
**Five High Ridge Park**  
**Stamford, Connecticut 06905-1326**

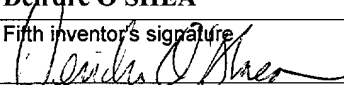
Direct Telephone Calls to: *(name and telephone number)*  
**Dean Alderucci - (203) 705-3006**

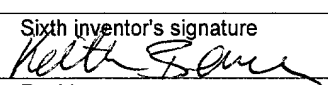
Full name of sole or first inventor <b>Jay S. WALKER</b>	
Sole or first inventor's signature 	Date <b>3/31/99</b>
Residence <b>124 Spectacle Lane, Ridgefield, Connecticut 06877</b>	
Citizenship <b>USA</b>	
Post Office Address <b>Same as above</b>	

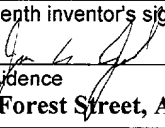
Full name of second inventor, if any <b>Daniel E. TEDESCO</b>	
Second inventor's signature 	Date <b>3/31/99</b>
Residence <b>192 Park Street, Apt. 6, New Canaan, Connecticut 06840</b>	
Citizenship <b>USA</b>	
Post Office Address <b>Same as above</b>	

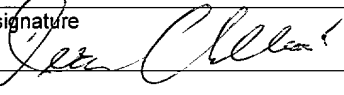
Full name of third inventor, if any <b>Stephen C. TULLEY</b>	
Third inventor's signature 	Date <b>3/31/99</b>
Residence <b>15 River Place, Stamford, Connecticut 06907</b>	
Citizenship <b>USA</b>	
Post Office Address <b>Same as above</b>	

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Citizenship <b>USA</b>	
Post Office Address <b>Same as above</b>	

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Sixth inventor's signature 	Date <b>3/31/99</b>
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Citizenship <b>USA</b>	
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Citizenship <b>USA</b>	
Post Office Address <b>Same as above</b>	

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Eighth inventor's signature 	Date <b>3/31/99</b>
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Citizenship <b>USA</b>	
Post Office Address <b>Same as above</b>	

Full name of ninth inventor, if any	
Ninth inventor's signature	Date
Residence	
Citizenship	
Post Office Address	

Full name of tenth inventor, if any	
Tenth inventor's signature	Date
Residence	
Citizenship	
Post Office Address	